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Changing Perceptions of Nature in Upland West Java: The Kasepuhan Case

A thesis submitted for the degree of Doctor of Philosophy
In Environmental Anthropology

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January 2004



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Abstract

This thesis examines how uncertainty and risk are defined and managed by Kasepuhan in Mt. Halimun, West Java, Indonesia, in relation to their conception of nature. Kasepuhan accounts of their settlement arrangements, cosmology and agricultural management all suggest that they perceive the greatest dangers as coming from 'within' (the self, or the community), and that risk management should therefore move from microcosm to the macrocosm. In the face of modernization and globalisation, including participation in gold-mining and the tourist industry, Kasepuhan face new risks and uncertainties, and increasingly the causes of these are seen to be exogenous as much as endogenous.

In contrast to the neighbouring Baduy, Kasepuhan adopt a strategy of risk management which reflects a willingness to compromise, to seek the advantages of both modern and traditional practices. Government bureaucratic and literate models of representation are adopted which both maintain their separate cultural identity, and which enable them to better control subsistence risks. Unlike the Baduy, Kasepuhan are more prepared for change and their institutions and practices have a greater resilience in the face of change.

Preface

I had heard about Kasepuhan before I definitely decided to undertake a study and fieldwork there. Like the nearby Baduy, who have for much longer time been the subject of scholarly interest, the Kasepuhan have been known locally as traditional Sundanese. The area where both the Baduy and the Kasepuhan live is commonly called by the Sundanese the *Pakidulan* (lit. 'the South'). This designation is linked to the well-known story of Nyi Roro Kidul, the Queen of the South Sea (Indian Ocean), which is also popular throughout the southern coastal area of the island of Java. For example, the first president of Indonesia, Sukarno, and Sultan Hamengku Buwono and his descendents, the kings of Yogyakarta, were and are mythically associated with Nyi Roro Kidul from whom their power is said to be derived. It is also believed that this area is a potent source of magical power and practices. However, although Kasepuhan strongly believe in the existence of Nyi Roro Kidul, perhaps because they live in the uplands far from the coast, her name is mentioned less and her influence is not as important as among the coastal population.

I became interested in Kasepuhan while undertaking research in Leiden, the Netherlands, for my masters degree in 1997, particularly after discussions with some members of LEAD (the Leiden Ethnosystems and Development Programme) which from 1994 to until at least the end of 1998, had carried out research in the Kasepuhan area on indigenous agricultural knowledge, in cooperation with Padjadjaran University, Bandung. Kasepuhan, who willingly cooperate with the outside world, and Baduy who have remained closed, provide an interesting comparison of different ways of ensuring cultural survival while at the same time accommodating the modern world.

During my fieldwork in 1998-1999 Indonesia was experiencing both an economic and a political crisis. The rupiah to dollar exchange rate jumped from an average Rp. 2909 in 1997 to Rp.10.014 in 1998, and down to Rp. 7855 in 1999. It should be noted that the exchange rate is vulnerable to the political situation and in the past has often fluctuated greatly from month to month. For example, during the year 1998, it was Rp. 17.000 on 22 January, Rp. 10.500 on 21 May (after the fall of the New Order regime of Suharto in May), Rp. 13.000 on 1 August, and Rp. 7.750 on 11 November. These crises have also affected the life of Kasepuhan.

I would like to thank Professor Roy F. Ellen for his encouraging supervision and comments on my work throughout this project. I wish also to thankfully acknowledge the support of the staff of the Anthropology Department of the Kent University at Canterbury.

My thanks should also go to the Head of the Faculty of Social and Political Sciences, University of Padjadjaran, Bandung, for allowing me to pursue postgraduate studies at the Kent University. But it is not without the trust of the Kasepuhan population who were willing to share their life with me that my study was possible to be done. For this they earn my deep appreciation and gratitude.

Love is due to my family for their constant support over the years.

Rini Soemarwoto Canterbury January 2004

Note on Orthography

In this thesis I used **boldface** for all Kasepuhan terms. Kasepuhan names, titles, expressions and sentences remain the same as the regular text. Indonesian words are <u>underlined</u>. For Javanese and Sundanese terms I use Batang font. Kasepuhan and English glosses are in single quotes; scientific names are in *italics*. Scientific names are used preferentially throughout while Kasepuhan terms are used for biological species if appear they represent an important emic concept. Glossary 1 converts scientific names to Kasepuhan; Glossary 2 provides English terms for Kasepuhan parts of the house; Glossary 3 provides English translations of general Kasepuhan terms.

Chapter One

Introduction

1.1 Global environmental change and human cultural adaptation

Green issues have become a pressing concern for the majority of people in the world. With the progressive depletion of natural resources and the attendant destruction of the environment, traditional values, knowledge, and practices are increasingly seen to contribute to the solution, or at least the amelioration, of many local resource management problems. The environment, however, is changing as a result of a combination of natural climatic oscillations (such as both the El Niño and La Niña) as well as through increasing human intervention. This latter category includes large-scale deforestation and the emission of a massive amount of greenhouse gases, the production of which can be understood in terms of a growing global population, technological innovation and an ever-expanding market and information economy, which now reaches even the remotest areas of the Earth. It is itself a consequence of the situation we have come to describe as 'globalisation' that the relationship between humans and their environment is having to change at a correspondingly accelerated rate.

From an ecological point of view, human cultures co-evolve with the environment in which they live. People adapt to the environment and use information resulting from environmental change to re-adapt to new conditions. While cultural change is faster and more flexible than genetic change (e.g. Ellen 1994a) there is inevitably a time lapse as people take time to accommodate to a new situation. Moreover, slow and subtle changes may not be perceived by people, whilst at the other end of the scale when environmental changes are very fast people are sometimes unable to adapt quickly enough to escape the hazards encountered, even when these hazards have been perceived. An example of this is the way rapid economic growth has marginalised local people who cannot rapidly adapt their lifestyle and production methods from a family and subsistence-based system to a predominantly market economy. In such a context, practices which may have been ecologically sound for many centuries may overnight become dysfunctional and cause serious problems. A specific example of this are the traditional fishponds of West Java through which domestic waste and human faecal matter have long been recycled to feed fish and to fertilise water irrigating crops (Soemarwoto 1994). Traditionally people have not used the water from these ponds directly for their domestic needs, but have piped it in from further upstream. When the

human population was low the spatial and temporal distance between use and reuse of the water was large. There was ample time for the water to repurify itself by natural processes. It was a sound ecological practice for making use of waste matter. But the population has been growing and the spatial and temporal distance between use and reuse has become ever smaller, to the extent that it is now widely considered insufficient for the water to be made suitable again for human domestic use. For a time fishponds became a serious source of diarheal disease in West Javanese villages, causing high infant mortality (Abisudjak 1992). In regard to these problems local people have not been made aware of subtle but crucially significant changes of population growth and have not adapted accordingly. Another well-known example is that of swidden cultivation (in West Java, called huma). Under conditions of low population density and of low economic demand to produce cash, the fallow periods following the cutting of forests can be kept sufficiently long to allow nutrients to regenerate and to restore the ecological functions of the forest. Under such conditions swidden agriculture can be practiced on a sustainable basis. However, it is usual that when population density and the need for more cash grow, the length of associated fallow periods diminish. Degradation of the forest land ensues and the system becomes unsustainable.

In this thesis I focus on the analysis of changing perceptions of nature among the Kasepuhan people, as their physical environment alters and as they are exposed to new ideas. However, what might constitute 'nature' for Kasepuhan is not easy to define and, as we shall see, different cultural constructions of nature are not immediately commensurable. In this study I identify and make use of descriptions by Kasepuhan of what they perceive as environmental risk. The subject of perceptions of risk cannot be studied without reference to the social and cultural influences of government, media, social movements and other agencies, which for a variety of reasons are seldom wholly intellectually consistent, nor politically united. In this thesis I will also demonstrate how the conflicting interests of the various parties involved in resource management can be both the explanation of, and the driving force behind, further environmental destruction.

1.2 Kasepuhan: the environmental management of a 'traditional' Indonesian people

The Kasepuhan live in the upland areas of West Java, at a distance of about 180 km from the Indonesian capital city of Jakarta. The centre of the ancient Padjadjaran kingdom - the reputed origin of Kasepuhan - and, the colonial Kebun Raya, the national

botanical garden, which has been influential in the modern Indonesia conservation movement, are both located in present day Bogor at a distance of 60 km from Jakarta.

The Kasepuhan people have long practiced a form of swidden cultivation, locally known as huma. In the past, the Kasepuhan population enjoyed less restricted access to forests, and at a time when population densities were low, fallow periods were sufficiently long to allow areas of forest to re-grow before they were cleared again. No noticeable environmental degradation occurred. As recently as the 1960s, many Kasepuhan grew rice without the application of fertiliser. Hence, huma cultivation might be seen as an 'ecologically wise' practice. For many scientists and environmental activists who value traditional wisdom, Kasepuhan agricultural practices are still considered to hold the key to sustainable resource management, and hence should be preserved. But nowadays widely divergent and contradictory perceptions are attached to the practice. While the Kasepuhan insist on regarding themselves positively as 'an adat' community', central Indonesian government authorities generally treat them as isolated and backward people, 'masyarakat terasing/terbelakang' 2, practicing an outdated mode of agriculture, incapable of adapting to change nor of contributing to national development, and who are thus is in need of development. In official circles it is widely believed that swidden cultivation is ecologically destructive, and inadequate to cope with the needs of a growing population³ (see e.g. Dove 1983, 1985a, 1985b for a critique and analysis of this official position).

It is of course possible that both views may be partly correct. The idea of leaving Kasepuhan to themselves in their own intact territory is an idealistic one, as whilst this land has the potential to provide for a sustainable existence, there are many forces which prevent this from being a realistic option. It is apparent that the views of Kasepuhan themselves are in flux, particularly because of the policy of their spiritual and cultural leader, Sesepuh Girang Abah Anom, in cooperating with the outside world in general and with the Indonesian government in particular. The Indonesian government has mounted campaigns to increase production through introducing wet rice cultivation and promoting the use of high yielding rice varieties, which are gradually displacing **huma**.

¹ Adat is derived from the Arabic word for custom, referring to certain provisions (with regard e.g. to clothing, houses, law, ritual, marriage, and moral conduct) which carry an enforceable sanction (Van Vollenhoven 1981: 1-6, Ter Haar 1948, Hooker 1978, Ellen 1983).

² On 'masyarakat terasing' see Koentjaraningrat 1993: 9-16, Persoon 1994: 65-7, Ellen 1999: 135.

³ This view is clearly expressed by the Ministry of Forestry who put <u>peladang berpindah</u> shifting (swidden) cultivators in the same category as <u>perambah hutan</u>, forest encroachers who are targeted for re-settlement (and necessarily have to be controlled) under the reforestation and land rehabilitation programmes (Ditjen Reboisasi dan Rehabilitasi Lahan, Departemen Kehutanan 1997/8).

The government has also established plantations in the area as well as creating the Mount Halimun National Park to conserve soil and biodiversity. But while the aims of these policies may be well intentioned, they have in turn reduced the access Kasepuhan have to forested land. Gold mining by a government company, and by many illegal miners, in the area is also having a deleterious effect. Such interventions not only have physical consequences, but also impact on the worldview of the people, as do national education and health programs, tourism, and research activities conducted by Indonesian and overseas scientists. So, whether they like it or not, the Kasepuhan are coming into contact with new forces which are affecting their lives. With these developments Kasepuhan perceive a qualitative shift in their capacity to manage environmental variability.

1.3 Stability, instability and the measurement of risk in human ecological systems

By the nineteen seventies the dominant paradigm in ecology and in ecological anthropology was holism (e.g. Odum 1963, 1971, Moran 1990), in which the focus was on the dynamics of entire ecosystems rather than on the autoecology of individual species, or on the role of individual human actors. There are many definitions of ecology, one of which simply describes it as the science of interaction between biotic and a-biotic factors which in turn give rise to an eco- or ecological system. An ecosystem consists of individual components which interact to create a whole which is more than the sum of its individual parts i.e. through dynamic interaction there is continuous productivity. Whilst in a constant state of flux, identifiable periods of stability and relative equilibrium can be distinguished on the basis of particular characteristics called 'stability domains' (Holling 1978: 30-33). Disturbances may occur, but the system is predicted to return to its stability domain. Changes may often be gradual and almost imperceptible, but also cumulative, causing a time lag between the actual change and their being observed or experienced (Mannion 1997). However, when the disturbances overwhelm the internal ecosystem mechanism and are great enough to exceed its resilience, the thresholds are rapidly crossed and a lagged response is replaced by an immediate response. In this case, the ecosystem may flip into another stability domain with new characteristics. Holling (1973) concludes his account of this by saying that the persistence of relationships within a system is determined by their resilience, while stability, on the other hand, is the ability of a system to return to a state of equilibrium after a temporary disturbance. It is thus

possible that a system can be very resilient and still fluctuate greatly, i.e. has low stability. If resilience is lost or reduced, a chance and rare event that previously could be absorbed can trigger a sudden dramatic change and loss of structural integrity of the system. In its long history of several billion years, planet Earth has gone through many stability domains (Graves and Reavey 1996).

Human beings use resources from their environment to support life. The capacity of humans to make, through recognition, and to use resources has continuously increased, particularly through the development of technology, which has been why different stability domains have been transcended (see e.g. Odum 1971). Technology essentially enhances the capability of human beings to transform and utilise energy which during the early years of human evolution was only derived from internal metabolism. Gradually the energy devoted to internal metabolism was increasingly supplemented and replaced with energy from external sources, by using fire and later through the combustion of fuels in engines which may be called external metabolism. While early humans depended primarily on the energy of internal metabolism, modern humans are characterised by their capacity to harness ever larger amounts of energy from their external metabolism, so that the ratio of internal to external energy becomes smaller and smaller. This has the effect whereby increasing amounts of carbon which have been fixed in the biomass of green plants, both present and particularly in fossilised forms, are being released into the atmosphere, hence increasing the atmospheric carbon concentration.⁵ Viewed from this vantage point human beings are an ecological factor which can be seen to be reactivating the ecological cycle of carbon which was temporarily stopped by green plants and the subsequent fossilisation process.⁶ There are other chemical elements which are also utilised by humans some of the residues of which when released into the environment are toxic to human beings, for example cadmium,

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⁴ These general observations and inferences have formed the basis of a number of influential approaches in ecological anthropology, for example those associated with Leslie White (1959), Bennett (1976) and Ellen (1982)

⁵ The IEO2002 projection case shows that in between 1990 and 1999 total world energy increased from 346.2 quadrillion Btu to 381.9 quadrillion Btu, and is projected to grow to 612 quadrillion by 2020 – a 60 percent increase. Carbon dioxide emissions were 5.827 million metric tons carbon equivalent in 1990 and 6.097 in 1999, and are projected to grow to 9.850 in 2020. In 1999 carbon dioxide emissions from industrialised countries accounted for 51 percent of the global total, followed by developing countries at 35 percent and the Eastern Europe/former Soviet Union at 13 percent. Compared with most of the industrialised countries, where most of the energy is derived from oil, coal and gas, a much larger share of energy consumption in developing countries (particularly in Asia and Africa) comes from biomass, which includes wood, charcoal, animal waste and agricultural residues (DOE/EIA 2002)

lead and mercury. Furthermore new chemicals are being synthesised, many of which do not readily degrade in the environment, and which interfere with ecological processes, such as the depletion of the stratospheric ozone layer by chlorofluorocarbons (CFCs). If these processes continue, a new stability domain may well develop in which humans would not survive.

1.4 Cultures of risk

In the previous section I have tried to show how ecological science has tended to approach variability, change and unpredictability through descriptions called ecological systems. However, this discourse is one which includes a very particular and specialised set of understandings and informed perceptions. Though parts of this model may overlap with how particular folk societies or emic cultures understand environmental risk, it is of little help in understanding how humans with different cultural predispositions, and in different social contexts, think and act in regard to environmental risk. In order to take the argument further it is necessary first to define more clearly what is meant by 'risk' and then to see how it is embedded in different cultural traditions.

Risk as defined by the Royal Society Report (1992) is the product of the probability and utility of some future event. As the product of probability 'risk' should be differentiated from 'uncertainty'. This basic conceptual distinction between risk and uncertainty owes its origin to Knight (1921) who established the notion that measurable uncertainty to which one can assign numerical probabilities should be called risk and 'true' uncertainty is where numerical probabilities cannot be applied. All risks are conditional and therefore should not be considered synonymous with danger. The Royal Society Report stresses the importance of differentiating between objective risk and perceived risk. Because objective risk is based on scientific assessment, perceived risk is regarded as more relative, though in either case nothing is as certain as the prospect of 'probable' uncertainty. Adams (1995) has shown that objective statistical data used inappropriately may lead to errors in measuring and subsequent representation of risk. Low accident rates do not necessarily indicate that the risk is low. It could be that a high risk was perceived and avoided. Fischhoff et al (1981) argue that most of the general public tend to overestimate the unusually visible, sensational, and easy to imagine risks (e.g. homicides, industrial accidents such as the Chernobyl nuclear accident). These risks

⁶ Though recent trends show a tendency to replace fossilised with non fossilised energy sources this still raises other problems as to how much this would in turn increase air pollution e.g. the problem of incineration which releases toxic substances into the air.

also tend to be over reported in news bulletins and other media outlets. Perceived risk, therefore, is strongly related to social context (Caplan 2000).

What Kasepuhan call **risiko** (itself, most likely from English, 'risk') seems to come most closely the scientific meaning of risk. Kasepuhan use **risiko** when referring to the occurrence of dangerous and costly results which might follow a particular action. Thus, as with the scientific definitions, **risiko** is always conditional. However for Kasepuhan the resulting events, or circumstances are mentioned in relation to **katangtuan** (certainty, or, 'the rules') in a continuum between **tangtu** (certainty) and **can tangtu** (uncertainty). The resulting undesirable events, such as earthquakes, are probabilistic and dangerous but, unlike the scientific conception, they do not enter into a Kasepuhan risk calculation as **bancana** (hazard) if there is no identifiable human actor as a cause. When human causes are identified a resulting earthquake might in turn be understood as a hazard. Risk calculations for Kasepuhan, therefore, must always involve 'individual human behaviour', specifically mis-behaviour, and comes from 'within' (the self or community).

Thus risks exist as descriptions; based upon observed or thought behaviour from previous similar events. Therefore, establishing what is a risk involves a decision-making process. It is the 'degree' of certainty or of confidence felt in the conclusion that has the greatest practical significance (Knight 1921: 231). Since risk is by definition correlated with the prospect of negative outcome, this means that when someone has decided to take an action involving risk he or she took a chance that something unpleasant may happen (Rescher 1983). Fischhoff et al (1981) discuss risk evaluation more in relation to the notion of acceptable risk. Both of the studies cited approach the evaluation of risk and how far it is acceptable as a decision making process, involving a cost-benefit analysis in which the various options and consequences, information and uncertainty involved are taken into account, and estimating the connection between cause and effect (Adams 1995). People will readily risk a small amount in the hope of winning a large amount when known or estimated adverse probability against winning is much in excess while they commonly will refuse to incur a small chance of losing a larger amount for a virtual certainty of winning a smaller, even though the actuarial value of the chance is in their favour. In the light of the arguments of Rescher and Fischhoff et al risk taking and acceptable risk are therefore distinct decision-making problems. The former is a decision as to whether a risk should be taken or not. The latter is a decision as to whether accepting the risk would make the risk become a real risk and whether it would be

worthwhile to take the risk: it is a process of evaluation of a real risk as it is being experienced. The distinction is important since whether risk is involuntary and unavoidable, voluntary and avoidable, delayed and immediate, expected and unexpected, has a great impact on how people evaluate and accept respective risk. When someone performs a risky action voluntarily and, perhaps, in fact avoidably, he or she is, it would appear, aware of the possible negative consequences (or hazards) and is willing to accept them. To borrow Holling's ecosystem terminology, by expecting some future hazard, we ensure greater resilience to the risks expected. On the other hand, when uncertainties are dismissed and not planned for, the crises that follow are more intense. This has led Watt (1974) to describe such a reaction as the 'Titanic effect'. Somewhat different, although related, is when future values and benefits are expected to be very high some people may find it acceptable to sacrifice the present. This has been exemplified by Berger and Mohr (1975) for migrant workers in Europe, but it is common also in non-Western societies. In Indonesia, at least among the population of Java, children are treated as a kind of future insurance. Parents expect that their children will give a return by taking care of them in their old age. Therefore present 'sacrifices' involved in raising many children are deemed acceptable.

To understand what different people consider as environmental risk requires that we also understand how these different populations construct nature. Our understanding of the cultural construction of nature has progressed markedly over the last 30 years (e.g. MacCormack and Strathern (eds) 1980, Ellen and Fukui (eds) 1996, Descola and Pálsson (eds) 1996). On the one hand anthropologists and cognitive psychologists (e.g. Atran 1990, Mithen 1996, Ellen 1996b, Boster 1996) have shown the common elements which underpin all human constructions of nature (cognitive constructs of 'natural' kind and the ideas of natural history intelligence; notions of self and other, and ideas of 'essence'). On the other hand, anthropologists and historians have shown the dramatic differences between human populations as to how nature is constructed, to the extent that in some cases it has been questioned whether 'nature' exists as an emic category at all (Strathern 1972; 1980, Ortner 1974, Ingold 1988; 2000). Cutting across the various typologies which have been suggested for how conceptions of nature vary, Schwartz and Thompson propose four general models as to the degree to which different cultures describe natural risk (cited in Pepper 1996). The first is that nature is benign i.e. predictable, bountiful, stable, and forgiving of any insults of humankind; the second that nature is ephemeral i.e. fragile and needs to be managed; the third that nature is tolerant and that, within limits,

can be relied upon to behave and provide in a predictable fashion; and the fourth that nature is capricious i.e. unpredictable. The extent to which, in each cultural case, these models apply depends on the perceived relationship expressed by human actors between themselves, the exogenous controlling forces (which may be understood spiritually, or materially) and the actual technical and material capacity of humans to control risk (see e.g. Milton 1991). For Kasepuhan nature is predictable with a pre-destined trajectory, which they call **sajarah**.

No matter how nature is defined in different societies it is nevertheless always the case that through time people experience manifest and qualitative natural change, some of which is regarded as unpleasant and threatening. Of course, awareness of such change has been longstanding, particularly in Western history, with the rise of the romanticism of the natural other (and the desire for 'nature' conservation) in response to the process of urbanisation, industrialisation and the disappearance of a rural idyll (see e.g. Oelschlaeger 1991, Evans 1992, Worster 1994, Wynn 1998). Books such as 'The Natural History of Selborne' by Gilbert White [1789] and 'A Sand County Almanac' by Aldo Leopold [1949] poetically describe and the writers' impressions about the natural environment, such as wildlife and seasons, have become classics in the Western tradition. However, the beginning of public consciousness of ecological transformation and biodiversity loss and its translation into a specific political movement - that which we now call environmentalism, can be traced back to 1960 when Rachel Carson published a series of essays about the adverse effects of insecticides on the balance of nature followed by her best selling book 'Silent Spring'. In 1967 White published an article which blamed Western ideas of human domination over nature, and of opposing man to nature, which derive from Judaeo Christian teachings, as the root of the environmental crisis. There are some similarities here with Islamic teachings, to which, directly or indirectly, the majority of Indonesians subscribe. These share the Judaeo-Christian idea of stewardship and provide instructions as well as warnings not to abuse their power, with the key word 'not exceed than what is necessary', as there are only one single world for all (Khalid and O'Brien 1992, Kula 2001).

The advanced use of technology, which generally relates to the Western idea of domination over nature, is often contrasted with oriental and tribal societies, which are considered as living in harmony with nature, but who at the same time are also portrayed as cruel, savage and poor (Borgstorms 1997). The same dualistic view of nature fostered a contrast in environmental consciousness between 'shallow and deep' (Naess 1973, Fox

1984), and the opposition between 'civilisation and wilderness' (e.g. in American historical discourse: Turner 1921, Nash 1967, 1972). Generally, traditional non-Western views of nature, with their emphasis on holism, have uncritically been considered by Western scholars to endorse and encourage a benign attitude towards the environment. Such views have often been embodied in the notion of 'traditional ecological wisdom'. Many of them are congruent with a logic of animism, in which, for example, trees, having souls or spirits, should not be needlessly disturbed. But while it is believed that tribal and oriental eco-cosmologies stress a harmonious relationship between people and nature, environmental destruction is no less in Asia than in Europe (Bruun and Kalland 1995). For example, while the Japanese are much admired for their respectful attitudes toward nature they face the same severe environmental disruptions as most other developed Western countries (Kalland 1995). Through globalisation, Western notions of nature, and how to protect it, are being increasingly accepted in Asia, along with a dichotomous distinction between society and nature (Marshall 1978, Ellen and Bernstein 1994, Ellen 1996a). This is linked to the idea that as economies develop so, somehow, humans distance themselves from nature.

The paradox is thus that whilst development is desirable it often results in disharmony relation between people and their environment; not a desirable state of affairs. We can see an example of this paradox in modern West Java. In Indonesian state discourse, pembangunan (development) is associated with socio-economic advancement, which, in most cases, is valued above nature, and is contrasted to old, unchanged and traditional ideologies (Dove 1988). Undeniably, there are positive symbolic resonances attached to traditional, unchanged and 'natural' places and people, but the existence of 'traditional' values which put development above nature are often overlooked. Magnis-Suseno (1984: 147-50) notes, for example, that the well known Javanese teaching of mamayu ayuning bawono, which may be translated as 'to make the world beautiful', is negated by the teaching of babat alas.

Historically, babat alas was associated with pioneer clearing of wilderness areas (e.g. forest) for rice cultivation and settlements (see e.g. Geertz 1956a, Donner 1987: 57-75, Carey 1979, Houben 1994), which was seen as a desirable and noble act. The Majapahit story in the Pararaton and Nāgara-Kĕrtagama begins with the story of prince Vijaya who cleared a tract of land where he began to build the kraton. The Mataram history in the Babad Tanah Djawi, composed by Agung's court-poets, begins with a similar story; a track of land was given to one of Agung's predecessors for him to bring it

into cultivation and to build a residence for himself. The connection between 'clearing the land for cultivation and turning a new page in Java's history is evident (Vlekke 1959:146). Among the Balinese, Prince Sutasoma is considered a civilised man as it is he who tames the wilderness and 'brings light where there is darkness' (Hobart 1990). In this context, therefore, the word 'beautiful', used by Magnis-Suseno, has a sense of 'suitable for human use', which is partly achieved through babat alas. A similar sense of the ideas of cultivation for human use is also reflected among the Sundanese, popularly phrased as follows.

gunung kaian gawir awian sampalan kebonan pasir talunan dataran sawahan legok balongan

plant a mountain with trees, plant a steep slope with bamboos, make a field into a garden, plant hills with trees to become orchards, make a flat field into wet rice fields use concave ground for a fish pond.

Forest as a dangerous place where demons, evil spirits and robbers reside is a common perception among the Indonesian population, notably for the Javanese (see e.g. Boomgard 1995, McVey 1993). Only holy men, such as begawan (sages who dedicate their lives to the gods) and powerful ksatrias (defenders of the country and righteousness) can survive in forests. The idea persists today, as when babat alas is used figuratively to praise other kinds of pioneering activity and good deeds, such as the establishment of universities. The creation of transmigration settlements⁷ in the Indonesian 'Outer Islands', and the large plantations in Sumatra and Kalimantan established since the nineteenth century and over the last two decades of the twentieth century and the one-million hectare New Order rice field project of president Suharto in Central Kalimantan, may also partially be understood in relation to the spirit of babat alas.⁸

With the move – through development – from a traditional to a modern, global, market, industrial economy, the way in which risks are perceived and managed also changes. According to his concept of reflexive modernisation, Beck (1992) sees science and technology as no longer just a source of solutions (as in the simple model of

⁷ Transmigration (Ind. <u>transmigrasi</u>) is the Indonesian scheme of resettlement (for mainly farmers) from over populated islands (such as Java) to less populated islands (e.g. Sumatra). This scheme was begun by Dutch administrators in the early of twentieth century with the aim of redistributing population, but importantly also to fulfil a shortage of labour for the fast growing foreign plantations in the Outer Islands (see Hardjono 1977).

development), but increasingly as part of the problem. There are risks which have been produced as a consequence of scientific efforts to improve social standards; scientific interventions have introduced new risks which were previously unknown. Examples include the depletion of the ozone layer by CFCs and the emission of greenhouse gases as a result of the burning of fossil fuels. With modernisation, industrial society becomes a risk society and becomes a risk in and of itself. In a similar way Giddens (1991) sees that in the reflexivity of modernity, science does not lead to increasing certainty, rather it undermines the certainty of knowledge, what Beck calls manufactured reflexive uncertainty. To live with modernity, therefore, is to live in an environment of increasing change and risk: it is to live in a risk culture. This is what Beck and Giddens have described as 'the end of nature', in which there are no longer any aspects of the physical environment untouched by the intervention of humans, and of tradition where life is no longer looked upon as fate. With risks that threaten and spread everywhere consciousness and commonality of risk is consolidated (Beck 1992, Furedi 1997), leading to a situation where small local frameworks of tradition may be replaced by larger institutions of a wider society. In this way individuals become alienated from local and pre-existing obligations and institutions. But Wildavsky (1991, see especially chapter four) argues that banishing a technology without considering the benefits that may be lost is to take too narrow a view. Many of the technological advances made during the past two centuries have been accompanied by a dramatic reduction of risks, such as in healthcare, where, amongst others, the diseases smallpox and polio have been controlled. A further difficulty with the Beck view is that other, pre-industrial, societies have learned to accommodate high levels of risk and might be said to have a risk culture, for example, the Javanese population living on the edge of the active Merapi volcano (Laksono 1988), or Moluccan fishing communities located on low-lying coral banks which are frequently flooded (Ellen 1987). Risk culture is not, therefore, the preserve of modernity.

Mary Douglas (1992) takes a different tack in her analysis of the social embeddedness of risk perception, emphasising how people are predisposed to locate the explanations of risk in their relations with other people, to find scapegoats for misfortune: they seek to anthropomorphise, socialise and – indeed – personalise, the causes of risk. This view derives from Douglas's earlier work on witchcraft and sorcery (Douglas 1970). When Douglas's view is related to the theories of Beck and Giddens it is

⁸ On the other hand, positive symbolic salience is still attached to remote, unchanged and 'natural' places and people, such as the Baduy and Kasepuhan – what are described as mandala communities in Javanese thought.

as if the risks of which they speak are spread so widely as to make the source unidentifiable, and therefore the scapegoat likewise, which further undermines traditional social bonds. Therefore, the central question is not so much that risk is spreading uncontrollably, but that the source of the risk cannot be clearly identified. For example, in the continuing debate concerning the source of the risk of global warming and climate change, the developing countries accuse the developed ones because of their relentless appetite for energy, while the developed countries point their finger at the developing ones because of their large-scale deforestations. The truth is, of course, that both are guilty, although in different ways and to different degrees.

To understand perception of risk it is necessary to explore further the relationship between natural events and social experience. It is apparent that traditional Sundanese, in particular Kasepuhan, consider a solar or lunar eclipse as a bad omen, the consequences of which must be avoided by staying indoors, and making a great deal of noise, as if to exorcise a bad spirit. In contrast, British people consider a lunar eclipse, such as that which occurred in 1999, as a purely aesthetic, if awesome, phenomenon. Of course, the meanings people attach to certain events are often purposely cultivated. Thus for many Javanese, for example, whilst there is a sense of danger and potential hazard which accompanies a solar eclipse the greatest anxiety arises because of media influences, many controlled by the Indonesian elite interests, which in the part have seen reason to exaggerate its negative impact (Keeler 1988). But why, if this is due to propaganda, does it only impact on Java and not in Sulawesi, which would receive the same national news?

There is now an extensive literature on cultural variations in the conceptualisation of nature and disagreements on the meanings that should be attached to them. The senses of the English word nature are complex, sometimes contradictory and often elusive (e.g. Olwig 1993, Soper 1995, Williams 1997). Historical, geographical (e.g. Collingwood 1965, Thomas 1984, Hirsch 1995, Coaster 1998) and ethnographic studies (e.g. MacCormack and Strathern 1980, Ellen and Fukui 1996) show that the meanings attached to nature change through time and between societies.

It is the ways in which humans manage their environment and act in the world which has a direct bearing upon how they perceive nature. Abstract representations and models are, therefore, informed by individual bodily practices and the transformative impact of these practices when they are organised and cumulative. It has been suggested that people, who use simple equipment, such as hunter-gatherers, derive the meaning of nature through what Gibson (1979) and Ingold (1996) regard as 'direct perception', in

which prior to the process of perception the natural environment is a neutral domain. It only takes on meaning when it provides 'affordances', that is opportunities for use (Ingold 1992). The idea of nature as something apart from the world of humans arises when a boundary emerges as a result of people modifying nature, typically through cultivation (e.g. Dwyer 1996). In Maluku, among the Nuaulu, because people grow crops which reproduce vegetatively (such as sago, taro and yams) as opposed to grains, which need constant weeding and attention, and engage in a kind of swidden cultivation in which gardens merge with forest, the distinction between nature and culture, wild and domesticated, is correspondingly uncertain (Ellen 1999).

There are also variations in the extent to which people include spiritual forces and dimensions in their conceptions of nature and of the environment. While it is now generally accepted that it is empirically difficult to establish ecosystem boundaries, especially for systems in which human populations are key components (Ellen 1990, Moran 1990), and that the concept of ecosystems has been widely misunderstood and mis-applied in the context of human studies. This system is not an ecosystem in the conventional sense, dealing with the objective flows of biophysical energy and materials, but one which – in an attempt to portray how Kasepuhan describe their own situation – also includes their spiritual world. Such emic models of human-environment interaction have been widely analysed and called variously 'folk models', 'ethno-ecological models', 'cognitive models', 'eco-cosmologies' or 'cosmovisions' (Rappaport 1967, Reichel-Dolmatoff 1971, Croll and Parkin 1992, Posey 1999).

The discourse on conceptions of nature comprises, of course, much more than the opposition between the holistic systemic view, of say hunter-gatherers (Turnbull 1974) and the dualist view of dominance, as in, say, high-energy agriculture or industrialism. Our understanding of how people conceive the natural world has been informed through many studies of folk classification. Berlin et al (1981) and others (e.g. Atran 1990) have shown that humans organise their perception of natural kinds in universally similar ways. But to concentrate on classifications and nomenclature in order to explain how humans think about nature can be misleading because to do so would involve presenting arguments based on abstract codification and categorisation, rather than on how people practically and meaningfully interact with the world. For example, it is difficult to obtain from a list of categories or names any indication as to the breadth and depth of knowledge which informs understanding and action, as much of this knowledge is non-verbal (Ellen 1996b, Bloch 1992), such as **katurutan** (personal

suitability) or **buyut** (personal forbidden ness) inform each Kasepuhan household on how they should relate themselves to a particular plant.

From the literature review it is clear that different peoples have different 'risk cultures'. With increasing access to outside information Kasepuhan understanding of nature is changing, in particular they perceive increasing scope for its manipulation: in other words, to put it in cosmological terms with which they might be familiar 'the corridor of the nature is widening'. In traditional cosmology, the greatest risk comes from 'within' (the self or community), but a wider conception of natural causation now offers alternative explanations. Sesepuh Girang is able to state, that 'alam geus meléncéng ti sajarah', 'nature is shifting from a pre-destined course', for example, in these new times the causative human agents are often outside the Kasepuhan community. In this context risk not only emanates from 'within' but from 'without'.

1.5 Methodology

As this study concerns changing perceptions of, and attitudes to, risk in a semiliterate society in a remote location, formal questionnaires were of limited use, being difficult to administer and providing questionable results. Instead I used techniques of participant observation as a means of collecting information. That the cycle of agricultural activities among Kasepuhan takes at least one year to observe helped set the parameters of my own fieldwork: from June 1998 to August 1999. In addition I returned in July 2000 for one month. During this period Indonesia was experiencing both an economic and a political crisis. It is my opinion that the general spirit of 'reformasi' encouraged people to be more open in speaking to me than might have been the case under the Orde Baru (New Order) of Suharto, which was essentially centralist, bureaucratic and authoritarian, and typified by order, rule and hierarchy (e.g. Cribb 1988, MacAndrews 1986, Manning 1988, Hardjono 1991, Visser 1993, Hooker and Dick 1993, Goodfellow 1995, Schiller 1996). However, marked differences between respective groups and a threat of violence fostered by the breakdown of civil order also created an atmosphere of mutual distrust. Prices of food and clothing jumped two or three times as did prices of agricultural inputs, such as fertiliser and pesticides. The consequences of such radical inflation has of course been economically damaging to the people. It also made my research more difficult, especially with respect to personal security. But undertaking research during this period has also had its advantages. Specifically, it

allowed me to observe change and risk-avoiding behaviour very much as they were taking place.

When I first arrived in Kasepuhan I stayed in the Bumi Rakyat, which together with the private residence of Sesepuh Girang, leader of the Kasepuhan, formed the Bumi Ageung, the ritual house of Kasepuhan. After some time I felt that this arrangement distanced me from the ordinary people. I therefore arranged for other accommodation. But although the stay in the Bumi Ageung, close to Sesepuh Girang, had disadvantages, it also permitted me to establish a better relation of trust with the Kasepuhan population, particularly in relation to the affairs of men. This was because Sesepuh Girang allowed me, as a woman, to participate in **ngembang**, a periodic ritual pilgrimage to graves of former Sesepuh Girang in several different villages. The importance of this came to me much later. But I also became aware of how difficult it is to do research as just a man or a woman. I found it difficult to have the same degree of closeness to both sexes at one time. From the beginning I had been regarded as closer to 'male traits' that is a person who do more external than domestic activities, and this was the description they gave to me. It was unavoidable.

An individual researcher is obviously limited in the scope of her observations. I have concentrated on particular households in the Kasepuhan Kampung Gedé (central village) of Ciptarasa. Based on various reports and publications available in the Dutch libraries of Leiden, different households were provisionally selected on which to focus, and which would reflect particular facets of how people's perception of nature and natural hazards were being influenced by changing environmental and social events. Given the moral, individual, and 'conditional' character of Kasepuhan risk perception, and its concern with 'undesirable events', formal questionnaires and interviews would not have been very helpful. Instead I adapted to the rhythm of daily life in a way which allowed me to observe people's practical understanding of risk without imposing a logic alien to Kasepuhan thought.

The first household which I chose was that of the Sesepuh Girang, i.e. the Abah Anom's household, because Abah Anom is the central point of communication and the paramount decision maker within the Kasepuhan community (Erwina 1997). The second household chosen was that of one of the Baris Kolot Indung, with special responsibility for internal community affairs. It was he who was responsible for determining the times at which various agricultural phases began, was responsible for their corresponding ritual, and also guarded the heirlooms of the Sesepuh Girang. The third household selected was

one who's head had established many contacts with the outside world and who had undertaken government and other training, especially in relation to his role as a guide for tourists, researchers and mining prospectors. The fourth household was of a couple engaged in running a warung (small shop). However, during the course of study, I did not restrict myself only to a focus on these targeted households, and to obtain a wider view of the Kasepuhan scene I visited other villages and locations for periods of several days at a time. Sometimes I was specifically invited to other villages. This often happened when there was some special event, such as a salametan⁹ marking the beginning of a particular phase in the agricultural cycle, for example ngaseuk (planting), mipit (harvesting) or nganyaran (tasting the new harvest rice).

Data derived from direct observation were supplemented by interviews with specialist informants, and through a variety of informal participatory opportunities, such as when talking leisurely about daily events and when having meals together with the head of the family, his wife and children. Participating in household activities, such as washing clothes at a communal bathroom, preparing food in private and in a communal kitchen, and pounding rice in a lisung (wooden morter) provided opportunities to discuss and gossip about current trends and events from the particular point of view of women. I also accompanied people to the rice fields, working with them and staying at the saung (the field hut) to rest, when making palm sugar, eating picnics and when watching television. As our relations became closer, so I gained their confidence. Once I had become accepted I was no longer a threat, and people started to invite me to participate in their daily activities, such as preparing the ingredients for a ritual, or collecting fuelwood from the surrounding forest. In accordance with Kasepuhan belief that knowledge consists of three categories (private knowledge, knowledge for a limited circle and public knowledge) there was data which was given to me in confidence, for example certain jangjawokan (spells) and myths. These material I promised to keep confidential and not make public. Although I have drawn inferences based on these data I have respected Kasepuhan wishes. In addition to standard ethnographic techniques of data collection, I have also used photography and audiotape, but always with the knowledge and consent of the local people. In some cases, the use of both techniques was actually at the request of Kasepuhan who themselves made recordings. The

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⁹ The purpose of the Kasepuhan **salametan** is similar to the slametan described for the Javanese: a ritual to achieve a state of slamet (well-being) (Beatty 1999; Koentjaraningrat 1985; Geertz 1960). The ritual includes incense, offerings, words of intention and dedication and prayers and is used as the mediator to connect between spiritual (alus; batin) and material (kasar; lahir) dimensions. According to Geertz, slametan enhances the sense of social solidarity of the participating group, and appeases and conciliates local spirits.

timetable of research was planned so as to minimise any bias in my interpretation of events and practices. Thus, the collection of information from official publications and interviews with local and central government officials and other authorities, and with NGOs, was only undertaken after most of the village fieldwork was complete.

No significant language difficulty was encountered in the field as both I and most local people share Sundanese as a first language. Sundanese language, following Wessing (1974) is stratified into four levels: **lemes pisan** (very refined), **lemes** (refined), **kasar** (unrefined), and **kasar pisan** (very unrefined). Satjadibrata (1950), however, places a **panengah** (middle) category in between **lemes** and **kasar**. In daily life most Kasepuhan use **kasar** words, although those who are able may pay attention to the use of levels when speaking to people from outside the community and locality, for example those from the towns.

It is common among the Kasepuhan, that after having started a family a couple are addressed using the name of their first-born child. For example, Kokon, the father, and Heni, the mother, are both called Arna, after their son. Similarly, Arta and Juariah are both called Juju, after their daughter. Consequently, this form of address and reference does not encode for gender. Gender is understood from the context of the conversation. In addition, and according to Sundanese custom, it is considered rude to call someone simply by their given birth name, the term **ki**, abbreviation of **aki** (grandfather), likewise **nini** (grandmother), **abah/emak** (father/mother), **mang/bi** (uncle/auntie), **aa/dede** (older/younger brother) should be placed in front of someone's name to show respect. Therefore, in this thesis, for convenience, I will use the terms above in front of birth names throughout, rather than use teknonyms.

1.6 Organisation of the dissertation

This study is divided into eight chapters. In this present chapter I have introduced the main research questions and discussed methodology. In chapter two I describe and discuss the background to Kasepuhan ethnography in relation to both current and historical regional and national contexts. The next two chapters, chapters three and four, explain how Kasepuhan understand and manage risk in relation to their physical, social and ideological environment. Specifically, chapter three introduces the local environment, discuss a rather idiosyncratic pattern of settlement, profiles the Kasepuhan population and its various social divisions, and says something about Kasepuhan identity in relation to their folk history; while chapter four describes

Kasepuhan concepts of nature as these ideas are reflected in their practical life. I consider the relationship of 'knowledge' to 'know-how' in local terms. The intention of chapter five is to show how conceptions of nature and risk are negotiated in a world which Kasepuhan increasingly share with other non-Kasepuhan actors. It starts with a discussion of the meaning of forests for both the Kasepuhan themselves and for state conservation agencies, followed by narratives of negotiation between modern and traditional practices and ideas. It further describes the impact of modern ideas on Kasepuhan thought and daily life. From a basic understanding of what might constitute risk and of what outside forces impact on Kasepuhan, chapter six focuses on risk management and rice subsistence practice. Chapter seven explains how the Kasepuhan view environmental risks in general terms, based on an analysis of risk perception in relation to forest fire and climate change, mercury poisoning, gold mining tunnel collapse, domestic pollution, the introduction of high yielding rice varieties, pests infestations and crop failure, and biodiversity loss. Chapter eight summarises the distinctive meanings attached to environmental risk for the Kasepuhan and summarises changes in the way they apprehend risk.

Chapter Two

The Wider Context of Kasepuhan Ideas of Nature and Development

In this chapter, I attempt to situate Kasepuhan life within the context of, firstly, conservation and environmental policies, by examining the history of conservation in an Indonesian context, how these connect with general Indonesian constructions of nature and attitudes to wildlife, and how contemporary Indonesian conservation discourse relates to development, pembangunan. Secondly, I examine government strategies for pembangunan, and say something about how Kasepuhan have experienced these.

2.1 Scientific nature conservation in the Dutch East Indies

I do not intend here to cover the full range or history of environmental issues in Indonesia, but merely to attempt to present some of the more salient features which might be said to influence contemporary state, regional, NGO and local discourse, to serve as background for the Kasepuhan study.

As in other parts of the world, conservation in Indonesia has its roots, paradoxically, in the requirements for regulated and sustainable hunting (Boomgaard 1999, Jepson and Whittaker 2002). In the light of the debate between Boomgaard (who sees the values underlying this as rooted in indigenous (particularly Javanese) aristocratic practice), and Jepson (who sees the role of ex-patriate European elites as fundamental) it is likely that the idea of 'exotica' has much influenced the development of ideas of nature preservation and conservation. Through local ideas of spiritual danger and holiness (in Java, angker) certain places and habitats have been indirectly protected for centuries, but Western private initiatives have on the whole been historically recent and secular, and from the very beginning have been instrumental in procuring legislation for nature conservation. For example, in the Netherlands, the Vereeniging tot behoud van Natuur-monumenten, the Society for the preservation of Natural Monuments which was founded in 1905 was at the beginning primarily concerned with protecting the existence of the marshy land of Naardermeer for nesting birds in spite of its official designation as a dump site for the city of Amsterdam. Despite such voluntary movement, Westermann could write in 1945 that 'Holland was still without a state body primarily concerned with conservation'. In Britain the Society for the Prevention of Cruelty to Animals had been founded in the 1820s, becoming the RSPCA in 1840. Interestingly, the Royal Society for the Protection of Birds had been founded in 1889, precisely to regulate the import of bird-of-paradise plumes from what is now Indonesia (Cribb 1988).

The establishment of the Botanic Garden in Indonesia at Buitenzorg (now Bogor) in 1817 by C.G.C Reinwardt translated a European interest in 'the science of exotica', in a very visible institutional form, into an Indonesian context. This event can be considered the beginning of nature conservation, in a Western sense, in Indonesia, although in an entirely ex situ way. Subsequently it was followed by the establishment of the Natuurkundige Commissie van Nederlandsch Indië (Natural History Commission). To begin with, the Natural History Commission served merely the desire of educated European society for knowledge, although later it developed much more economic relevance, particularly following the adoption of the agrarian policy in 1870.

Throughout the Dutch colonial period conservation ideas thus underwent a radical transformation. In response to the need for botanical and zoological researches to support Western-owned plantations, particularly, in Sumatra and Borneo, a herbarium was established in the botanical garden at Buitenzorg. Branches of the botanical garden were established, in 1889 at Cibodas, about 30 km south of Bogor, for higher altitude plants; the Purwodadi garden near Malang in East Java; and the Eka Karya Garden at Bedugul, Bali. As in other European colonies (most notably in Britain), botanic gardens played an important role in the economic development of the Dutch East Indies through the introduction of new crops (e.g. the oil palm from Africa), and were the predecessors of the agricultural research stations: "...the Botanical Garden offer an opportunity for botanical study in practicality every respect' (Dammerman 1945:59). Cibodas, for example, was used for research on the adaptation of temperate zone crops, such as strawberries and apples. The quinine plant, which originates from the highlands of South America, also began its Indonesian life at Cibodas, but became most successful in the mountain areas of the Priangan, south of Bandung. Before World War II the Dutch East Indies produced some 90% of the world production of quinine. To support the introduction of new crops a special garden of economic plants was established in Bogor, and in 1901 the Zoological Museum was established to study pests. The inventorisation and rational management of natural resources was thus undertaken comprehensively through the s'Lands Plantentium, a scientific institute comprising the botanical gardens, herbarium and zoological museum (Went 1945, Furnivall

1944:304). Therefore, since the colonial period in Indonesia there had been a strong link between the desire for science and economic necessity. The economic importance of West Java in particular began in the 1930s, during the Depression, with the intensification of tea and rubber plantations and has become the most industrialised region of Indonesia in the post-independence period (Dick 2002).

2.2 The colonial origins of Indonesian conservation legislation

Since the colonial period extensive forest lands have been cleared for sugar and tobacco plantations in the lowlands, for rubber in the lowlands and middle range altitudes, and for quinine and tea in the highlands of Java (Furnivall 1944, Boomgaard 1994). During the British interregnum of 1812-1817 Stamford Raffles conducted a cadastral survey of the land owned by the native population (Tjondronegoro 2002). This, in turn, enabled Governor General Van den Bosch to establish the Cultuurstelsel in which the people were forced to plant commercial crops and remit them to the government in lieu of taxes. By 1864 the Dutch colonial Comptabiliteit (accountability) act introduced a dualistic legal land registration system, in which Civil Code law applied only to European land while native land could not be registered, as it was the subject of unwritten traditional adat law (except in a few areas such as Bali where old registers were kept by local chiefs). In 1870 the Dutch colonial government proclaimed the Agrarische Besluit (agrarian decree) referred to as the 'State Domain', according to which land which could not be proven to be owned by the people was considered to be government land. Considering that the cadastral registration of Raffles was still very rudimentary, most of the land became government land – which then allowed its disposal to private entrepreneurs through heritable leases (erfpacht). Large plantations extended to the Outer Islands, and in 1930 the area of concessions outside Java was mainly confined to North and South Sumatra. It was between 1880 and 1900 that the export agriculture of the Netherlands East Indies began its greatest development (Honig 1945). Transmigration due to the uneven distribution of the human population began; immigration and labourer opportunities in the Outer islands had occurred, but large areas had also to be cleared for food crops for the growing native populations.

Teak (*Tectona grandis*), mainly from lowland Java, was an important forest resource at this time. In 1870 there were about 13 timber firms, rising to 63 in 1880. Although the Clearings Ordinance which forbade further clearing of forest lands was issued in 1874, this

was not enforced effectively until 1884, and it was only in 1890s that forest extraction began to be regulated on a more scientific basis. Note here that shifting (swidden) cultivators were already seen as the part of the cause of soil impoverishment and deforestation (Furnivall 1944: 179, Van de Koppel 1945: 218).

In Indonesia, as it happens, the first in situ nature reserve was actually established at the slopes of Gunung Gede, West Java, in 1889, long before the Nature Monuments Ordinance (Natuur Reservaten Ordonantie) was enacted (1916). This reserve has now become the Gunung Gede-Pangrango National Park, which in 1992 was extended to include the Gunung Halimun National Park, and in 2003 the Gunung Halimun-Salak National Park. The Netherlands East Indies Society for Nature Protection, established in 1912, played an important role in the subsequent development of other nature reserves (Departemen Kehutanan 1986), providing an early example of the role of an NGO in Indonesian nature conservation. The approach, however, very much focussed on the protection of particular species in these designated areas, for example the Java rhino (Rhinoceras sundaicus) in Ujung Kulon, West Java, or the Orang-utan in Sumatra and Borneo. After independence the Indonesian government took further steps in nature conservation by establishing a large number of other national parks, totalling 14,382.668.09 hectares (Ditjen PHPA 1997/8). In West Java alone there are 177.956 hectares of national parks.

It was to limit the extensive hunting of birds of paradise that measures had first been taken to protect animals in the Netherlands Indies (Westermann 1945, Cribb 1988). Other countries, particularly Britain, were influential to this movement. Since 1905 there have been ordinances and regulations the purpose of which is to regulate hunting of this bird. In 1909 the 'Ordinance for the protection of some wild mammals and birds' was enacted, which was then entirely replaced by the 'Game and Wild Animal protection' act in 1931. The legal basis for gazetting wildlife sanctuaries was secured through the Nature Monument and Game Reserve Ordinance which was enacted in 1932, supplemented by the Nature Protection Ordinance in 1941.

Again, it is difficult to separate environmental conservation of this kind, specifically that which involves gazetting land, from other aspects of the colonial power relationship, particularly in relation to land policy. Land, according to the State Domain, was therefore legally available for the creation of nature reserves.

Conservation law generally focuses on species protection, habitat protection and the protection of archeological and historical monuments. The 1979 Berne Convention on the conservation of European wildlife and natural habitats, for example, sought to conserve flora and fauna, and to preserve habitats. The law provided for the extraction of plants and animals as valuable natural resources while protecting against the damage which uncontrolled nature could cause to man's interests (i.e. through the destruction of pests). The Convention also recognises and tries to limit the harm to the natural world caused by man. In short the Convention does not merely seek to protect exclusively and completely particular species, but tries to ensure that there are adequate numbers for continuing extraction, not just living organisms but also non-living components of the environment, such as water, air and earth. The Berne Convention is consistent with the approach promoted in the World Conservation Strategy (WCS) published by the IUCN, UNEP, WWF, and in collaboration with FAO and UNESCO, in 1980 i.e. in accepting the desire for preserving resources and maintaining genetic diversity in order to provide the basis for the future benefit of humanity. In this context, conservation is, again, applied to non-living as well as living components of the environment, renewable as well as non-renewable resources, and is viewed as a philosophical approach to the management of all activities that consume resources (Warren 1991:65). This approach has become central for much contemporary conservation policy, as evidenced in organisations such as the World Wide Fund for Nature (WWF). In principle, this modern legal concept of conservation is not much different from many traditional notions of 'the balance of nature', only the regulatory body is different. While modern conservation law has its origins in the development of property rights which accrue to the state (Klemm and Shine 1993) the enforcement of norms in traditional communities generally relies on a shared morality, backed up by communal and often supernatural sanctions.

2.3 Conservation and pembangunan

For the greater part of the nineteenth century, Indonesia was perceived by the Dutch as an extension of their own metropolitan economy, and as an almost infinite source of wealth: environmental problems and conservation were of little concern in this kind of ideology and economic system. However, despite the absence of an explicit concern with what we now call 'the environment', the colonial period was to put in place the infrastructure

through which later conceptualisations of environmental 'problems' were to be framed: on the one hand a legal framework characterised by a particular set of conventions, procedures, institutions, values and use of language; the construction in particular of a secular crosscultural land law, and the development of science as a set of ideas and social practices which would, first, view the environment in a particular way and then identify problems in relation to this.

It might fairly be said that this general social infrastructure, 'episteme' (Foucault 1998) or set of values, was firmly in place by 1900, and through the education system was beginning to be transmitted to local Indonesian elites. Developments in terms of consciousness of environmental problems from thereon might be represented as two phases. In the first phase, which occurred during the last part of the colonial period and, following Indonesian independence in 1945, until the 1960s, the environment was considered in a narrow manner which included only nature conservation, specifically of plants and animals. In the second phase, environment came to be viewed in a broader way to also embrace the non-living components of water, air and land. The second phase started in the 1960s when environmental pollution became recognised as a global concern. Undoubtly, the 1972 Stockholm UN Conference on the Human Environment played a decisive role in this new development.

After independence, as early as 1948, there was already a strong attempt to make a genuine Indonesian law to replace the 1878 Dutch Agrarische Wet, and in 1960 the Republic of Indonesia promulgated the Basic Agrarian Law (UUPA; Law No. 5 of 1960) in which the government placed the welfare of the people as a major goal. In principle, the Basic Agrarian Law was based on traditional adat law (art 5) and replaced the colonial dualistic system (with its distinction between European and native land) with a single set of rights (art 16). Based on this law, land reform was carried out. Unfortunately the government lacked the organisational and administrative capacity to implement the details, and to pay compensation. The land owning elite also obstructed it while the mass of small landless farmers lacked the power and organisation to counterbalance them. Consequently, the land reform was mostly a failure. In addition, after the extermination of the Communist party in 1965, the issue of land reform became closely associated with communist policy and was therefore removed from the political agenda.

Under the New Order regime of Suharto, the government's actions were, in practice, still based on the Dutch Agrarian Law of 1870, i.e. land not registered as people's land was considered government land. As a consequence, most land was considered to be government land. For example, about 70% of forests were administered by the Department of Forestry (Tjondronegoro 2002). The government freely designated certain forest areas as nature reserves and national parks and concessions were given to government and private companies for logging, mining, resettlement of transmigrants and other development purposes, without any regard to the rights of local people. Though in principle the Basic Agrarian Law is based on adat law it cannot enforce adat rights effectively given the implications of adat in terms of ethnic diversity (BAPENAS 1997). This has happened in the Kasepuhan area where forest lands were taken for a gold mine, the Gunung Halimun National Park and the PERHUTANI plantation. This practice still continues today. In all this, the protection of the ecosystem was implicit only in so far as it involved prohibiting local people from hunting and cutting down trees. Hunting, harvesting fruits and cutting wood were considered as theft. Thus the right of the local people to the forest was completely abolished. The law was, for the most part, rigorously enforced, linked to a regime in which the purpose of nature conservation was to protect certain species of plants and animals in designated areas. Such an approach found a place for biological research, in order to identify and monitor what needed to be protected, while social-economical studies became irrelevant, and for the most part neglected.

The 1972 Stockholm Conference brought to Indonesia a widening concept of conservation and pollution. The first Indonesian environmental conference was held in May 1972, just a month before the Stockholm Conference, with the title 'Seminar on the Human Environment and National Development', clearly showing the relationship of environment to development (Soemarwoto et al 1972). As a result of the debate at the Stockholm Conference a general discussion of environment *versus* development issues flourished in Indonesia. A consequence of the Indonesian seminar was the establishment of the Pajajaran Institute of Ecology, which was followed by the establishment of PSL (environmental institutes) at other universities. These institutes became a significant force in the environmental movement in Indonesia.

An overall law covering the environment was enacted in 1982 (The Basic Law on Environmental Protection and Management, Law No.4, 1982) which was improved in 1997

(Law No. 23, 1997) to become the Law on Environmental Management. Unlike the situation in most developed countries, where the law on the environment was initially defined to exclude human beings (Klemm and Shine 1993, Reid 1994), the Indonesian law defines environment as including human beings. Thus:

'The living environment is the spatial entity with all objects, potentials, conditions and living organisms, including man and his behaviour, which influence the continuance of the life and welfare of man and other living organisms' (Art 1[1]).

'The living environment' is, thus, a system that comprises the organic and the inorganic natural environment, the man-made environment, and the social environment which influences the continuity of life and the welfare of man and other living organisms. Hence, in Indonesia, the concept of a separate *social* impact study does not exist, but is in theory automatically conceived as part of a general impact study.

A major step in nature conservation was achieved by enacting Law No.5, in 1990, entitled 'Conservation of Living Resources and their Ecosystem', which explicitly shifts the approach from species to ecosystem. It should be stressed here that within the Indonesian context, living resources (Ind. sumber daya hayati) should be understood as biological resources, excluding human beings. Of course, one may argue that it would be more appropriate to have the title 'Conservation of Ecosystems and their Living Resources', rather than the other way around, which would place the protection of the ecosystem foremost and the protection of the living resources would follow naturally, because the living resources are part of their respective ecosystems.

Law No. 5, 1990, has been considered utilitarian (e.g. Whitten et al 1996: 724). Indeed, the term 'resources' is an economic term. It is undoubtly influenced by global developments going back to the UN Conference on The Human Environment in Stockholm in 1972, and the debate concerning whether environment should be discussed in isolation or in relation to development. In the developing countries environmental degradation has often been the result of inadequate or non-existent development rather than of overdevelopment, the situation found in developed countries (Founex Report 1972). This line of argument led to the introduction of the term 'eco-development', meaning ecologically sound development, and 20 years later the 1992 follow-up UN conference in Rio de Janeiro was officially entitled 'The UN Conference on Environment and Development (UNCED)'. This trend had been encouraged by the advocacy of many NGOs, for example as found in the

World Conservation and Development Strategy of IUCN. Thus the Indonesian Law No.5, 1990, may be considered as the national implementation of IUCN's conservation strategy (PHPA 1993).

The environmental laws outlined above have formed the basic legal instrument behind a series of government regulations and ministerial decrees on virtually every aspect of the environment. Examples are the regulations for environmental impact assessment, commonly known as AMDAL (PP No. 51, 1993, updated to become PP No. 23, 1997), and the ministerial decree on its implementation, the 'blue sky' programme (KEP-15/MEN/4/1996), the clean river programme (KEP-35/MENLH/3/1995), the everlasting coast programme (KEP-45/MENLH/11/1996), and the Adipura award for cities (KEP-15/MENLH/3/1995), respectively. Annual environmental awards, Kalpataru, for individuals and organisations (KEP-15/MENLH/3/1995) are also presented by the government to stimulate environmental awareness and proper environmental behaviour amongst citizens, organisations, and mayors.

The initiatives for issuing governmental regulations and ministerial decrees are not limited to the office of the Minister for the Environment, but other ministries are involved as well, such as the Ministry of Forestry and Estate Crops, the Ministry of Mining and Energy, and the Ministry of Public Works.¹ It can be said that as far as legislation is concerned, Indonesia has a remarkably complete set of environmental laws and regulations.

Since 2001, the Ministry for the Environment, under the leadership of Sonny Keraf, has succeeded in gaining support from the Department of Justice and the Department of Human Rights, through the so-called 'green police', or 'polisi hijau'. Although only consisting of 86 officers, these 'green police' receive environmental education as part of their training. In 2002, a new Minister for the Environment, Nabiel Makarim, recommended the formation of a Parliamentary Watchdog in the DPRD (The House of People's Representatives) at the provincial and kabupaten levels which would be responsible for identifying members of parliament and parties on the basis of their concern for environmental issues. The government has also started to record environmental law violations committed by businesses and industries. This record will be used to classify

¹ November 1994 the first RAKORNAS (Rapat Koordinasi Nasional, national coordination meeting) of Pengelolaan Lingkungan Hidup dan Pembangunan Berkelanjutan (environmental management and sustainable development) was held in Jakarta, opened by President Soeharto. The proceedings were published by the Kantor Menteri Negara Lingkungan Hidup 1998.

industries and business into black, red and yellow categories. Complying with the Parliamentary Watchdog recommendations, the report is intended to be published every six months, permitting the public to boycott violating firms if they wish to. In addition, a '12.12 formula' was issued in 2002 through a joint meeting of the Department of Justice and Security (DEPKEHAM), the High Council (MA), and the Office of the Council for the Prosecution (KEJAKGUNG). In this scheme 12 judges and 12 prosecutors will handle environmental regulation violations in court.² However, despite all these legislative efforts there is little evidence that ordinary members of the house of representatives take it sufficiently seriously. A meeting, in March 2001, between the DPR Committee VIII sector on mining and energy, organised by the Minister for the Environment and chairman of BAPEDAL, and the BAPEDALDA (BAPEDAL at the provincial level) for the provinces of North Sumatra, Lampung, Kalimantan and East Java, was attended by only 11 out of the 53 members of the Committee!

2.4 Contemporary Indonesian discourse on the environment: reconciling local perceptions and official constructions

There are two stories which well encapsulate some of the paradoxes in Indonesian attitudes to nature and the environment:

Once upon a time the Prince and His retinue gathered in the wilderness of Nandala forest. Encircling them everywhere was a fire, and all the animals came out of their hiding-places, scared, confused, and not familiar with the situation. The animals had a meeting to decide what policy they should adopt: whether to wait and die where they stood, or to run. The antelopes, deer and other timid beasts saw no option other than to run. The strong wild boars, buffaloes, boars, rhinoceroses, on the other hand, preferred to fight, and keep to the Law. Then the tiger, king of the forest, spoke. Both policies, he said, were equally worthy of adherence, but they should try to distinguish between the good and the bad among their attackers. If they are bad people then the worldly wahya action should be followed, and you should run or struggle. To be killed by their acts is purposeless. If they are honourable tripaksa then you will be found by the Prince. Await your death, offer your life, and do not be reluctant. For a Prince is an instrument for taking away the life of creation. Shiva is incarnated in Him, and he who dies by His hand will see all his sins forgiven. Such a death is more excellent than even throwing yourself into the honoured Holy mountain-lake. No more animal births would take place so that we shall be reborn. The animals turned around. Accompanied by the deer, the wild boars charged

² See 'Overview of the Implementation of Agenda-21' published by the Ministry of Environment in May 2002.

furiously. The first line of soldiers (and their dogs), one after the other, were struck down. Other soldiers came forward. Armed with heavy spears, they killed the deer, but then the rhinoceroses attacked in force. The soldiers fled, leaving many dead. Some climbed the trees, others steep rocks. At this point the member of the court intervened and fought. Even the Prince's priests took up arms, enthusiastically practicing wāhya activities, forgetting that they are already Kertawara (distinguished). The Prince, fearless on his battle chariot, followed the game. Though wholly powerless the fast game were followed by the horses. The King was well pleased. When the Mantri (mandarin) and bhujangga (officer of the clergy) entered into the Presence, his account of His feat caused laughter.

Another story is set in South Sumatra:

Elephants destroyed the crops and were hunted down by the King's army. But a white elephant appeared which defeated the army. The King shot him dead with his arrow. But the dead elephant's body disappeared and in its place appeared batara Gana, the god of elephants. The King asked batara Gana why the elephants were destroying the crops. The elephant god answered that the elephants did so because people were encroaching on their territory which would endanger the survival of the elephants, while elephants also had the right to live. The two agreed to live peacefully side by side and the King then made a line with his keris which demarcated the territory for the elephants and for humans.

The first story is of Javanese royal hunting described in the Nāgara-Kěrtāgama written in 1365 A.D. by Mpu Prapança, poet to the Majapahit king of Rajasanagara, famously known as Hayam Wuruk (trans. by Pigeaud 1960-63). The latter story tells of the resolution of the conflict between elephants and human beings written in the Serat Wita Radya in 1863 by Ranggawarsita, a bhujangga at the court of the Sunan of Surakarta (Soemarwoto 2001:135-137). The first story clearly indicates that 'It is privilege to die for the king even if you are a non-human animal', whilst the latter shows the basic idea of recognising the existence of wildlife which is the foundation of conservation. The two stories illustrate a contradiction found in many cultural constructions of nature and the environmental policies which follow from them: its simultaneous subjugation to humans (necessary if humans are to eat and survive), and the idea of peaceful coexistence of species described in term of relationship between species diversity and the ecosystem processes (e.g. Foley 1987, Norton (ed) 1986, Huston 1994, Terborgh 1992). We might see in these stories also a metaphor for, on the one hand, centralised, top-down interventions to control nature for the state, and, on

³ The story, interestingly, foreshadows the idea of a national park, and curiously was written down just nine years before the Yosemite National Park, the first national park in the world, was established.

the other, participatory, holistic, approaches which seek to reconcile human development needs and the protection of environmental resources.

It is now widely recognised that environmental issues cannot be easily detached from those of economic development, which in Indonesia is termed <u>pembangunan nasional</u>. In Indonesia the New Order <u>pembangunan</u> era followed the Old Order, during which Pancasila and its P-4⁴ had been laid down as the philosophical basis for development, providing a framework for unifying urban and rural, and also traditional peoples, including <u>masyarakat terasing</u>, and the modernising masses.⁵

In the first era after independence, between 1957 and 1966, under the Old Order of Soekarno's Guided Democracy, national integration was ensured through central planning and economic control. Most sectors of the economy were coordinated and regulated by the state (Dick 2002). Foreign capital was eradicated. Dutch enterprises were nationalised. In contrast, after 1968, the economic policy of the New Order of Suharto provided the conditions for re-entry of international capital. The foundation was economic development which emphasised 'the need to increase production and income' (Booth and McCawley 1981: 11), and the objective was to create state led-industrialisation. The export of oil and gas, minerals and timber became major contributors to the Indonesian economy, decisions concerning natural resources being in theory taken by central government for the benefit of the nation as a whole rather than by regional units.

However, instead of eliminating regional differentials, the post-independence government tended to follow the colonial Dutch's administration in creating a 'divergence in

⁴ Pancasila forms the 'Opening' part of the Undang-Undang Dasar 1945 (the 1945 Basic Statutes) proclaimed on Indonesian Independence day in 1945, and subsequently became the main ideology of the country (Panitia Lahirnya Pancasila). It consists of:

Ke-Tuhanan Yang Maha Esa (belief in one God),

Kemanusiaan yang adil dan beradab (just and civil humanitarianism),

Persatuan Indonesia (the unity of Indonesia),

Kerakyatan yang dipimpin oleh hikmat kebijaksanaan dalam permusyawaratan dan perwakilan (democracy led by wise policies, decided through a process of discussion and representation), Keadilan sosial bagi seluruh rakyat Indonesia (social justice for the entire population of Indonesia).

The P-4 (Pedoman Pengamalan dan Penghayatan Pancasila) course, which started in 1978, is a tool to spread the implementation of the ideology, which, is compulsory for civil servants. In the view of Sullivan (1991) it is the ideology of an 'imagined community'.

⁵ One example of this is in relation to rice. Officially the government has never campaigned in favour of 'eating rice', but rather in favour of food self-reliance (<u>swasembada pangan</u>), which puts emphasis on rice. The success of government officials, from the Governor down to the village head (<u>kepala desa</u>), is measured by their success in increasing rice production. These campaigns were BIMAS (mass guidance) and INMAS (mass intensification), the package which is widely known as the Green Revolution. Consequently, other starch foods have acquired a lower status.

paths of development between economic development on the one hand and political power or social impact on the other, leaving the Outer Islands in the shadow of Java despite their economic significance' (Lindblad 1993: 20). Thus, 'in practice there appears to have been relatively little change in regional distribution' (Booth and McCawley 1981: 88). Indeed, 'economic growth during the New Order era (1968-1998) had widened economic disparities between the rich elite and the poor masses as well as between urban and rural areas and between western Indonesia and the much poorer eastern part of the Archipelago' (Thee Kian Wie 2002: 227).

The New Order government, for over three and half decades, with its centralised top-down ideology, allowed little room for democratic discussion. What freedom of action was possible arose through interpretation or translation, and the notion of 'exception to the regulation' took an influential role in the implementation of policy. The patron-client personal relationship was dominant (Robison 1986). The process of decision-making often seemed less to secure the adoption and implementation of particular policies, than to ensure that individuals and groups gained access to the distribution of benefits. For Gray (1991), while Western democracies depend heavily on formal administrative procedures and process, Indonesian decision-making is less formal, while the statutes are typically written in general terms which allow the executive branch to make policy through presidential and ministerial decrees. Thus, laws may be contradicted by lower level decrees and regulations, and by the daily actions of administrations. For example, with regard to the Basic Agrarian Statutes, more than 300 decrees in relation to transfer, zoning, and acquisition of land administered by the Agrarian Office at the provincial level are complicated by the involvement of the departments of Forestry, Energy and Mineral Resources, Environment, Economy, and Home Affairs, which may show interest at the level of implementation.

Statute No. 41/1999, for example, prohibits open mining activities within protected forest. Through meetings between the DPR Committee VIII and III, and the Minister of Economy, Minister of Energy and Mineral Resources, Minister of the Development of Kawasan Timur Indonesia (KTI, eastern parts of the Indonesia), Minister of Forestry, and Minister for Environment the Government asked the DPR to give an exemption to 22 existing miners. These miners had signed the concession licence before the statue No. 41/1999 came into force. In the KTI mining activity had reached the advance stage (Kompas 09/07/2002). Paul Coutrier, the Executive Director of the Indonesian Mining

Association, formerly the head of BAPEDAL, suggested that as KTI lacked industry the mining activities would make a substantial contribution to local development, and that the several protected forest areas were anyway only *Imperata* grass (Detik 14/03/2002). Dorodjatun, the Minister for the Economy said that foreign investors would run away if the government could not provide continuous assurances to them. Until at least July 2002 the debates were still continuing.

It was inevitable that <u>reformasi</u> after 1998 brought further chaos. Whilst there was a re-organisation of the Kabinet Pembangunan into a Kabinet Reformasi, the slogan of <u>reformasi</u> also led to changes in existing statutes and decrees – there was even an attempt to make an amendment to the UUD 1945. Government Regulation PP No. 22/1999 concerning the autonomy of provinces provided opportunities for conflict between regional interests over natural wealth and central government environmental legislation. For example, through regulation No 22, a Bupati, the head of a district, has the autonomy to issue policies regarding the management of natural resources (including the management of national parks). For one Bupati, the reform which merged the DEPHUT (Department of Forestry) with the DEPBUN (Department for Plantations) to create DEPHUTBUN was said to be because 'hutan mau dibabat dan dijadikan lahan perkebunan, karena rakyat perlu makanan', 'forest is intended to be cleared for plantations because so many people need food' (Kompas 14/06/1999).⁶

As such, many existing (and potential) conflicts resulting from the Kabinet Reformasi seems to have little concern with environmental issues. Hafid, the director of WALHI, criticised the year 2000 annual budget in which <u>lingkungan hidup</u> received only 0.4% compared to economic development, which received 79.3% (Kompas 15/02/2000). The Presidential decree KEPPRES No.2/2002 which replaced KEPPRES No.101/2001 brought BAPEDAL (Environmental Impact Control Agency) into the Ministry for the Environment. But as part of a Ministry of State BAPEDAL then had no power to prosecute. This is not surprising. During the general election of 1999 there were only 21 out of 48 parties that had environmental issues in their programmes, only two of which put them as a

⁶ However, on the other hand, in preparing to execute the Autonomy Statute No. 22/1999 the State Ministry for Environment had issued sectoral Agenda-21: the Guide Book for Sustainable development, in three series (2000), and the Settlement, Energy and Mining Agendas (2000).

priority (Veritas ITB 1999), and only one that recommended a department of <u>lingkungan</u> <u>hidup</u> linking <u>pusat</u> (centre) to <u>daerah</u> (region).

Despite the force of traditional conceptions of nature, in which human social needs are complementary to the needs of other components of the environment, and despite the influence of global ideologies of eco-development, sustainability and participatory conservation, the idea that environmental conservation is opposed to pembangunan still strongly prevails in Indonesia today. Though the Pusat Studi Lingkungan (Environmental Studies Centres) of the various universities have generally emphasised the positive relationships between environment and development, the NGOs which are quick at criticising government and private development, and in publicising their criticisms widely in mass media, have tended to stress only environmental destruction. As a result, a general picture has emerged that environmentalists are anti-development. On the other hand, the government has often been seen as anti-environment because in the name of development it has granted many concessions and permissions which in turn have caused many environmental problems. Politicians create regulations and laws, and set 'fences', but these may always be dispensed with in 'exceptional' circumstances. The UUD - which originally meant simply 'the basic statute' - is now mockingly referred to by many people as 'Ujung Ujungnya Duit', meaning that ultimately it is only about money

Let us explore an example of this. In 2001-2 the Indonesian umbrella environmental NGO WALHI revealed a number of official contraventions of environmental regulations, presented by the government as legitimate 'exceptions'. It questioned the legality of the HPH (Hak Pengusahaan Hutan, logging concessions) which had been granted by the Department of Forestry (DEPHUT), in the form of IPHHK (Ijin Pemanfaatan Hasil Kayu Hutan, permission for forest wood use), IPK (Ijin Pemanfaatan Kayu, permission for wood use), and HGU (Hak Guna Usaha, right to use) authorisations. It questioned the legality of the process of Analisa Dampak Lingkungan (AMDAL, Environmental Impact Analysis) undertaken by LNG for natural gas extraction at Tangguh in Papua. Its investigations had also discovered and publicised the 'kongkalikong' collusion between forest officers and businesses involved in illegal timber extraction when issuing SAKB (Surat Angkutan Kayu Balok, logging transport papers) or SKSHH (Surat Keterangan Sahnya Hasil Hutan, authorisations for forest production) in North Sumatra. In East Kalimantan, they criticised

the policy of the Governor in issuing a special permission to PT. Kelawit Hutani Lestari to fell ulin trees (*Eusideroxylon zwageri*).

Of course, the term 'NGO' is highly problematic and conceals enormous variation in the kind of organisations and groups so-called. Indonesian themselves often informally distinguish three kinds. There are <u>plat hitam</u> (black plate), <u>plat merah</u> (red plate), and those which are <u>ditunggangi</u>, driven by the interests of particular parties (pressure groups) in a negotiation. The black plate NGOs are considered the most independent, with global charitable or philosophical aims (e.g. WWF, IUCN, UNDP). Red plate NGOs are government-sponsored, red being the colour of the registration plates on official government cars. And the <u>ditunggangi</u> are simply instruments for the pursuance of a particular sponsor's objectives. This, of course, is a recipe for much confusion and conflict. Rather than being part of the solution, NGOs are often part of the problem.

The prominent involvement of academics in environmental advocacy has inevitably resulted in the introduction of much scientific jargon, and use of English and Latin words into the rhetoric, and in the way in which environmental issues are generally presented and particular positions legitimated. Its impact is often confusing for poorly-educated local people, and has the effect of 'blinding with science'. Kasepuhan call this **basa ngelmu** (scholar's language).

In contrast to the use of scientific terms in environmental discourse, is the language used in popular government campaigns to improve environmental quality. For example, government at provincial, kabupaten, and kotamadya levels have instituted awards for environmental citizenship. One is the Adipura award for 'bersih, indah, teduh, sehat, dan nyaman', for 'a clean, beautiful, sheltered, healthy and comfortable' city, and is an example of the success of a particular walikota, or city mayor. It is also a reflection of how much the environment has become a political commodity, and a matter for KKN (collusion, corruption and nepotism). The award was started in 1987. In 1997 it stopped, though in 2001 there was an attempt to re-activate it. Artists too have been involved in some of these campaigns, their romantic idealised representations of the Indonesian countryside contrasting with some of the present realities.

In other instances environmental politics has involved appeals to traditional and <u>adat</u> values. Thus, the village of Adat Kuta, in Ciamis, West Java won the Kalpataru award from the Ministry for Environment in 2002. The 40 hectares forest around the Kuta village has

been considered sustainable for centuries. Interviewed by the media, Karma, their leader, simply says that their ancestors have taught them not to disturb and destroy the forest. With the growing interest of international bodies to indigenous knowledge many attempts have been made to strengthen, or even 're-invent' traditional views under the guise of 'traditional environmental wisdom'. Within this context indigenous and local peoples are learning to speak the environmental language spoken and legitimated by international development and conservation agencies. The traditional becomes incorporated into more encompassing political entities, with their attendant moral orders, and their law (see e.g. Ellen 1999). The case of the Moluccan 'sasi' institution for regulating harvesting is a very good example of this (Zerner 1994).

Such initiatives empowering local people have recently been given additional legal backing by the decision of MPR TAP No.IX/MPR/2001 on the renewal and management of agrarian and natural resources, in which Article 4 (j) stipulates that it is necessary 'to recognise, honour and protect the rights of the traditional (adat) law communities and the cultural diversity of the nation' with respect to agrarian and natural resources. Traditional communities, as adat law communities, now have a legal basis for defending their rights, and should therefore benefit from this decision. Unfortunately, however, there is no specific and explicit mention of revoking the State Domain, and no clear definition of what 'the rights of the traditional law communities' might mean. For example, do these only refer to the land currently being cultivated or do such rights extend to the forest areas which are traditionally being used for shifting cultivation? For Kasepuhan, these would include the forests which are undergoing succession from an 'abandoned' garden to secondary forest, and from secondary forest to 'primary' forest, without which their **huma** practices cannot survive. Clearly, the extent of such traditional rights are vague. Hence, it is still an open question as to whether the MPR decree will bring substantial changes or whether it is only a paper tiger.

Finally, in relation to the discourse on the rights of <u>adat</u> communities in relation to environmental protection, is the contentious concept of 'indigenous' peoples. In the 1980s NGOs, prominently those having an international link, started to voice their concern about the rights of what they called 'the indigenous people'. The term 'Indigenous' as applied to people is controversial and with complex political implications (Ellen and Harris 2000). Although the term is widely used by international NGOs, in an Indonesian context it is misleading because the majority of Indonesians are indigenous to their area. Furthermore, in

an Indonesian context, it has the connotation of being inferior, being considered synonymous with the Dutch term 'inlander' which was used for the native people who were placed at the bottom of the Dutch East Indies social hierarchy, below the Chinese and 'foreign orientals' (Chinezen and vreemde Oosterlingen) and the Dutch and other Europeans who occupied the highest ladder (Soemarwoto 2003, personal comm.). Soemarwoto suggests that a more appropriate term would be 'local people' or 'the <u>adat</u> law community' as used by MPR.

2.5 Present Environmental conditions

Environmental degradation and pollution continue to be major problems in Indonesia, and environmental issues have a high political profile. Deforestation rates over the last decade have been high, estimated to be more than one million hectares per year (e.g. World Bank 1990). Nature reserves are not safe from degradation. Illegal logging is rampant, for example in the Leuser National Park, North Sumatra (Kompas 14/06/1999), the Lore Lindu National Park particularly in Dongi-Dongi area, Central Sulawesi (Adiwibowo 2003), and the Orangutan habitat of the Tanjungputing National Park, Central Kalimantan (Kompas 27/07/1999). Even the Directorate General of Forestry of the Ministry for Forestry issued the right of use to KUD Sapo Padang to convert 300 hectares land of 890.000 of the Leuser National Park into Kelapa Sawit (Elaeis guineensis) plantation in January 1998. In Java, where forests are located near the forestry offices responsible for their management, and are easily accessible for the officers who patrol them, they are not immune from encroachment and illegal logging. Comparing the official data as reported in the Bureau of Statistics and those from RePPProT (1990), there is considerable discrepancy in the forest area. For example, in Java the official figure for forest coverage was about 23% in 1990, but according to RePPProT only slightly less than 10%. Not included is the destruction of mangrove forest. For example, 5,174 hectares of the largest mangrove forest in Java, at Nusakambangan, West Java, an area originally 16,504 hectares has now became dry land (Pikiran Rakyat 02/07/1999); while 50% of 207,800 hectares of marsh land in Lampung South Sumatera has been converted to agriculture and fish farming (Kompas 06/07/1999). We also cannot ignore the coral reefs. For example, more than 90% of coral reef in Ujung Kulon National Park, West Java (Kompas 09/08/1999) has been destroyed, while some

small islands in Tiworo Sulawesi Tenggara have disappeared altogether and some have been flooded by sea water (Pikiran Rakyat 08/06/1999).

One of the consequences of deforestation is soil erosion. Soil erosion reduces soil fertility and increases the deposition of silt along river courses and irrigation canals, and harbours, which increases the cost of their maintenance. Fish production is reduced. The World Bank (1994) estimated that in Java the economic loss due to soil erosion was US\$220 million. Deforestation also increases the risk of floods and droughts. The two are related because deforestation reduces the infiltration of rain water into the soil. On the one hand this increases the volume of run off which is a major cause of floods. The risk is magnified by the silting up of rivers. On the other hand it reduces the filling up of the aquapheres causing springs and wells to dry up in the dry season. Consequently, the maximum flows of rivers increase while their minimum flows decrease. Currently, floods in the wet season are alternating routinely with droughts in the dry season (Soemarwoto 2002, pers. comm.)

Although floods and droughts are related to each other, they are generally being tackled as unrelated problems. Flood control is being carried out by dredging rivers, straightening rivers, building new drainage canals, removing trash and aquatic weeds, such as water hyacinth, from streams, all with the aim of increasing the flow of excess water, directly or indirectly, to the sea. Of course, these measures are necessary, but they should be additional measures, since they have the disadvantage of discarding precious water which is needed for the dry season. In Kabupaten Ogan Komering Ilir, South Sumatera, drought in sawah of about 10.000 hectares occurred after the creation of an irrigation system (Kompas 08/09/1999). River dredging and straightening their courses, and building new drainage canals are also expensive and with high social costs in terms of resettlement. Shortage of water is being handled by building dams and canals, and pumping more underground water for industries and domestic needs. Dams control flooding, but again they are expensive and the social costs are high. Pumping more underground water aggravates the problem, since it increases the rate of depletion of the underground water, while the rate of refill is reduced due to the decrease of the infiltration rate of the rain water. It has been recorded that the water level in many places has lowered, e.g. in Bandung (Muhammad 1997). In Jakarta (Kompas 11/09/1999) and Bandung (Pikiran Rakyat 08/09/1999) for example, it has been recorded that land subsidence has occurred as a result.

Clearly, the development of a more appropriate and integrated flood and drought control system should be given high priority. First and foremost, the infiltration rate of rain into the soil should be rehabilitated by reforestation. This is not a new idea, it has been carried out in Indonesia for decades with a budget of billions of dollars. Unfortunately, the success rate has been very low. According to the Central Bureau of Statistics, in 1974/75 the total area of degraded lands was 12.6 million hectares (BPS 1976). The area jumped to 23.7 million hectares at the beginning of 1999-2000 (BPS 2001). And yet the budget is still insufficiently high.

In some areas there are pre-existing local technologies for coping with problematic water supplies. For example, in Nusa Tenggara the people have embung, a tradition of storing rain water in ponds. In mountainous areas people create ponds or small lakes by damming small streams. In Pontianak, West Kalimantan, the people used to harvest rain by storing it in small wooden tanks, but the habit was abandoned when piped water became available. In Maluku, complex arrangements of bamboo pipes ensure the supply of water to villages even in the dry season. If the modern authorities are willing to learn from the principles of rain harvesting practices which these traditional responses involve maybe urban problems of flooding can be minimised.

The problem of floods and droughts is further increased by the development of real estate in critical catchment areas. In 1996 a large flood inundated vast areas of Jakarta and in January-February 2002 there was an even larger flood. Some areas were inundated for a week or longer. The 2002 flood in Jakarta was estimated to cost Rp.30 trillion (US\$1 = Rp.10.000). During this event Jakarta's Governor blamed the West Java authorities for failing to control the Bogor-Puncak water catchment area to the south and southeast of Jakarta. But it is widely-known by local people that most villas and hotels in this area are actually owned by people from Jakarta. In Penjaringan, north Jakarta, while local people suffered severe flooding every year, in the nearby Pantai Indah Kapuk, a luxurious estate, the residents played golf and jet ski. The estate was formerly marshes and mangrove forest. This is not to mention exceptional rules, and conflicts and problems arising from lack of coordination between departments. Public opinion polls conducted by several media organisations reveal that the authorities are perceived as only being interested in making rules, talking, releasing information, theories and explanations, but not apparently capable of real action. People summarise this as NATO: No Action, Talk Only. The result is much disinformation. Private

bodies are perceived as much more helpful than state bodies. For example, Radio Jakarta, by creating a communication network with other private bodies during the 2002 Jakarta flood was able to give information on priority areas for the distribution of immediate food, health and clothing aid.

Big cities continue to suffer heavily from air pollution from car exhaust, for example Jakarta, Bandung, Surabaya and Medan. The health cost for Jakarta alone has been estimated to be US\$220 million per year (World Bank 1994). In Bandung acid rain has been recorded (anonymous 2003). Until 1991 the pH of the rainwater fluctuated between 6 and 7, in 1997 it often dropped below 6 and thereafter it dropped precipitously, approaching 3 in 2000 (Anonymous, 2003. West Java ASER 2002. BPLHD Jawa Barat, Bandung). Rivers are also heavily polluted with domestic and industrial wastes (World Bank, 1990). For Jakarta alone the health costs due to water pollution have been placed at US\$300 million per year. Cities are dirty because of uncollected garbage and the collected garbage is dumped in landfills which obviously do not satisfy sanitary requirements, since garbage is scattered all around. By late 2001 garbage in Jakarta was piled up everywhere. The Governor of Jakarta reasoned that this was due to the Bekasi city council's decision to close Bantargebang TPA (Tempat Pembuangan Sampah Akhir) waste landfills without first coordinating with Jakarta. The lack of street cleaners and lebaran, the Islamic festival at the end of Ramadhan, however, were said to be the causes, according to a Jakarta public affair's press release. Moreover, Indonesia had even been importing waste. Even though it attracted many protests, the Minister for Environment and the head of BAPEDAL at that time, Panangian Siregar, still gave, at the beginning of 1999, Singapore permission to dump its chemical waste in Riau, which was then trans-shipped to South Sumatra (Kompas 08 and 14/05/1999). Elsewhere the waste dumped from PT. Newmont, a gold mining company, has reduced fish production in Teluk Buyat, Sulawesi Selatan (Kompas 22/04/1999). Thus although Indonesia has a set of exemplary environmental laws, regulations and institutions in theory, there is widespread failure to use these effectively.

⁷ Note, however, the role of scavengers (Ind. <u>pemulung</u>) during the <u>lebaran</u> who ordinarily play a significant role in re-cycling garbage by sorting it according to value, re-selling it, even in some cases for food. See e.g. Pikiran Rakyat (20/07/1999) for special report on scavengers in Bandung, West Java.

2.6 Kasepuhan in the context of pembangunan nasional

Nowadays, formal relations between Kasepuhan and the wider regional and national context are managed by the present Sesepuh Girang, who handles negotiations with the Indonesian state authorities. In 1984, at the age of 17, Abah Anom Sucipta was elected as the Sesepuh Girang, the official leader of Kasepuhan. He follows his father, Ki Adjo, Abah Sepuh, in conducting an open policy towards the outside world, and demonstrates a willingness to cooperate with the Indonesian state. But it is admitted by some that the present Sesepuh Girang Abah Anom is more cooperative in this regard than his predecessors. During the New Order (Orde Baru) regime of Suharto, he supported Golongan Karya (GOLKAR), the government party, and during that time GOLKAR took one hundred percent of the vote in the Kasepuhan area. However, this pattern of support was evident widely amongst many of the more remote populations of Indonesia at the time, partly reflecting the fact that all officials down to desa and dusun level (and including kepala kampung) were thought of as civil servants receiving certain state benefits and who thus owed some loyalty to the government; and partly due to notions of traditional authority which favoured personal ties to a strong 'raja' over and above conventional notions of democratic will, and equally strong loyalties to local state officials who often held positions of traditional authority (e.g. Anderson 1983, Maurer 1994, Antlöv 1995). After the fall of the Suharto regime in 1998, Abah Anom joined PADI (Partai Aliansi Demokrasi Indonesia, Indonesian Democratic Alliance). In the 1999 general election⁸ he consented to become a parliamentary candidate for the PADI party. Had he won, he would have had to have spent most of his time in Jakarta, far from his people. He believed that with the reputation of Dr. Soetomo, one of the founders of Budi Utomo, PADI, chaired by Dr. Soetomo's son, Bambang Sulistomo, would bring a better government than the Suharto regime. However, for most Kasepuhan who gathered that portentous morning in early January 1999 at the Bumi Ageung's kitchen while waiting to vote, PADI was understood only through its emblem, the rice stalk. PADI representatives explained to them that the rice stalk symbolised their concern for people's need of rice. It was said that PADI policies were very close to

⁸ The general election for the MPR (Majelis Permusyawaratan Rakyat, The People's Consultative Assembly) and DPR (Dewan Perwakilan Rakyat, The House of People's Representatives) is held every five years. MPR is the state's highest political body with functions which include electing the President and setting down the GBHN (Garis-Garis Besar Haluan Negara; the major guidelines for future government policy). MPR also

their life and therefore the Kasepuhan should choose PADI. However for many, particularly old people, this was quite confusing as the rice stalk symbol was not only used by PADI but also by four others parties among a total of 48 participating in that election. The final advice given by Abah was not to choose party 'number two' (referring to the chart which displayed party names and symbols), formerly the GOLKAR number, but rather party 'number four'. According to Mang Aang, who had completed his education to SMP second year level, and who had administered the voting for Kasepuhan, PADI got about 80% of all votes in the Kasepuhan area. However, it turned out that PADI lost miserably overall and did not win a single parliamentary seat.

In 1988 Abah Anom, with the support of his people (and, it is said, that of the ancestral spirits) cooperated with the government in building the southern ring road from Bayah to Rangkasbitung in the north of what is now Banten province. In 1995, Abah Anom gave his idin (permission) for gold prospecting in the region, and allowed people from Kasepuhan to work as guides for tourists and researchers. As the leader of some 20,000 local people with an intimate knowledge of the area, the support of Abah Anom was, and continues to be, seen as a valuable asset for outsiders wishing to work in or visit the area. Indeed, one officer of the Mount Halimun National Park (Taman National Gunung Halimun, TNGH) acknowledges that it is easier to control Kasepuhan than non-Kasepuhan as long as it is possible to make a deal with Abah (Sesepuh Girang), as Kasepuhan will always do what Abah says. Abah Anom well understands how to use traditional community loyalty as a bargaining chip. Below is a statement made by TNGH on how they see Kasepuhan:

'good relations can be established with the Kasepuhan community through their <u>adat</u> leader, and will be a measure obtained as to whether a government programme rejected or not in this way; Kasepuhan have been very supportive to the TNGH mission by creating Self-initiative Security Units in three villages' (BTNGH 2002).

comprises all elected members of DPR, as well as its elected members. MPR meets only every five years while DPR is more frequent as it runs the daily business of legislation.

⁹Compare this situation with that of the Nuaulu of Seram, Maluku. In the general election of 1971, and possibly at other times, many Nuaulu regarded the pressure they were under to vote GOLKAR legitimated symbolically by the fact that the GOLKAR emblem was number 5 on the electoral chart of party emblems (where 5 is a symbolically salient number for Nuaulu, who belong to the Pata Lima (five) rather than the Pata Siwa (nine) grouping of Seramese peoples, and for whom the waringin tree (the symbol of GOLKAR) is mythically identified as the tree on Gunung Nunusaku which represents the place of creation of all peoples in their origin mythology (Ellen 2002 pers. comm).

Abah Anom has also supported research activities, both helping individuals, such as students studying for degrees, as well as institutions, including LIPI (the Indonesian Institute for Science), JICA (the Japan International Cooperation Agency) and PHPA (the Forest Protection and Nature Conservation Bureau), who began to conduct biodiversity research in 1995. The INRIK (the Indonesian Resource Centre for Indigenous Knowledge) at Padjadjaran University, Bandung, sponsored by the KEHATI foundation, was engaged in the creation of a medicinal botanical garden from early 1999. For two successive years, in 1997 and 1998, Ciptarasa was the location of a saraséhan (seminar) on eco-tourism, organised by TNGH and attended by more than a hundred people. The seminar was attended by local members of the Kasepuhan and non-Kasepuhan communities, Kepala Desa, Bupati, Kapolres, YEH (Yayasan Ekowisata Halimun), BScC (Biological Science Club), PERHUTANI and, of course, TNGH officers themselves.

At the Sarasehan Masyarakat Adat Indonesia (National Congress of Traditional Communities) held 15-22 March 1999, Abah Anom was nominated as chairman of the Aliansi Masyarakat Adat Nusantara (AMAN; Indonesian Adat Community Alliance). As it turned out, he was not elected. This Seminar was held in Jakarta and organised by the nationally recognised Indonesian NGO, the Lembaga Swadaya Masyarakat¹⁰ (LSM), which had been involved in environmental and land rights, the Telapak Foundation (Yayasan Telapak), LSAM (Lembaga Studi and Advokasi Masyarakat) and WALHI (Wahana Lingkungan Hidup Indonesia). The seminar was attended by about 400 representatives of adat communities throughout Indonesia. Among other participants were representatives from Toraja Sulawesi, Batak Sumatera and Maluku, etc. As a forum to voice the adat rights from thereon the activities of AMAN has received recognition community's nationally. As its activities are at the national level, Abdon Nababan, who has the degree title of 'Insinyur', was in 2001 AMAN's chairman. In 2001, at a one day seminar on a more fairer, democratic and sustainable resource management strategy, organised by the Ministry for Environment, he was one of the speakers, among other representatives from the Indonesian

¹⁰ In the Environmental Management Act No.4/1982 the official term for NGO is <u>lembaga swadaya masyarakat</u> (independent community organisation), which is also preferred by the NGOs to emphasise themselves as a development agency group (Potter 1996:14, Farrington and Lewis 1993:30). The term <u>lembaga non-pemerintah</u>, which is the literal translation of the term NGO is generally not acceptable as it carries the connotation of being 'anti-pemerintah'. For the official list of LSMs see Almanak Lingkungan Hidup Indonesia (Indonesian almanac of the living environment) published yearly by the Ministry for Environment. The term NGO, however, will be used throughout this thesis to avoid confusion.

Forestry Community, the Indonesian Mining Association, the Ministry of Mining and Energy, the DPR Committee VIII, and the Ministry for Forestry. AMAN had also sent 140 delegates to a Preparatory Committee Meeting (PrepCom) IV in Bali for the World Summit on Sustainable Development held in Johanesburg, South Africa, during May-June 2002. But some of these were arrested by the pecalang, the civil police of Bali, because traditional tools brought by some of them were interpreted as being intended for criminal actions

In practice, however, the presence of a high ranking government official, such as the Minister of Forestry at the 1999 AMAN seminar, was not a guarantee that the voice of the adat communities was really being heard. At the seminar, when Abah met the Minister of Forestry he expressed his concern as to the status of <u>adat</u> land and related land rights. The Minister suggested that they should map the land which they claimed. But as the local community had no access to government funding for this purpose, it became necessary to explicitly seek help from outsiders. In the Kasepuhan case this was essentially a mapping project, a project which then became another important factor in changing Kasepuhan perceptions and experience of the forest, an issue which I will discuss further in Chapter Five.

The adoption of a policy of opening-up and negotiating with the outside world was described by Abah Anom as a way of demonstrating that traditional communities could be self-reliant, represent their own interests at a national level and make a contribution to national development. Such a stance dispels the myth of poor and backward communities which are entirely passive and in need of outside and governmental guidance on the road to development. On the contrary – in Abah Anom's opinion - it is the city people, who claim to be modern, who need to be developed. On one occasion when Abah Anom was sitting and talking with some people in the kitchen of the Bumi Rakyat, he remarked:

when we go to the city we have to pay for everything: if we do not have money we cannot live, while here in our own community life is more secure, we treat other people generously and offer them everything they need, they may sleep or eat whatever they like.

Indeed, during years of economic and financial crisis in Indonesia, in August 1998, Abah Anom recalled many members of the Kasepuhan community who had returned from the cities to the mountains, where life was more secure.

In terms of <u>pembangunan</u> discourse, and of Abah Anom's perspective, the Kasepuhan people are not 'backward' in the sense that they do not have access to, or are not interested in, technology. In 1997, for example, with the assistance of UNDP through the Partnership in Development Forum, a national but internationally funded NGO, Kasepuhan built a water turbine on the Cisarua river near Ciptarasa to generate electricity, following the success of an earlier turbine project at Cicemet in 1996. In 1999 Kasepuhan were awaiting approval for a third turbine, this time at Cicadas. In each case, Kasepuhan provided the manpower and local materials in the form of sand and stone, while the supervisors came from Bandung.

Currently the Ciptarasa water turbine supplies seven villages, but as its capacity is higher than what has so far been used, in the near future it will be extended to two other villages, Nanggerang and Cianghangsa. The electricity supply runs from five in the evening until seven in the morning, and is administered by two persons who also have to deal with technical problems. There are two categories of consumer, 15 and 25 watt households, commanding a monthly payment of 1500 and 2500 rupiah respectively. There are also 15,000 rupiah loans available from the Kasepuhan authority for electricity installation which have to be repaid on a monthly basis. The amount of repayment, as set by the authority, is 500 rupiah per month. Though this amount is not obligatory, people feel éra (ashamed) when they cannot pay, and for this reason some have delayed their application for a loan, but some also feel no need for electricity. In order to be efficient financially, installation is arranged on the basis of one central electrical point for every five houses. A disadvantage with this arrangement is that when the use of electricity in any one of these five houses exceeds the capacity for all of the houses, the electricity is cut off. In such circumstances it is easy for one household to blame another and this can become a source of tension.

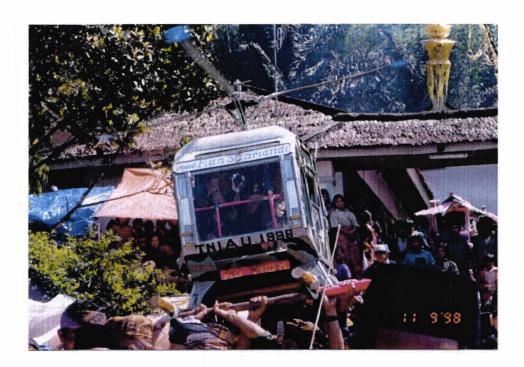
One evening while looking toward Cicemet from some high ground, Abah Anom said to me proudly that 'Cicemet is **ngagebyar**, full of light like Jakarta'. Who says that we (Kasepuhan) cannot be as good as the city'. His vision, however, is not to transform Kasepuhan into a kind of miniature Jakarta, but rather he and his people wish to remain an adat community. Abah says 'urang ulah jadi batur', 'let us not imitate others'. Abah's campaign for adat persuades many Kasepuhan people to see that it is to their pecuniary advantage to be labeled as 'adat people'. By managing to remain 'traditional', Kasepuhan

promote their way of life amongst outsiders.¹¹ In order to achieve this, one of the authorities' objectives is to enforce the original character of traditional buildings. The rules strictly apply to the buildings in the Kampung Gedé, especially those located along and near the main road, the reason being that these are places visible to the many guests who come and which are often filmed as part as tourism promotions. Outward symbols of tradition are, therefore, purposely cultivated, and traditional identities are maintained through symbolic physical representations. One might say, however, that Abah's commitment to traditionalism is motivated by fear that his power and status might otherwise diminish¹² as much as by a purely altruistic wish to blend tradition with modernity.

Abah Anom also promotes formal education for the Kasepuhan. In his opinion warga (member) need to be smart in order not to be cheated by clever people from the cities. Abah would like his own children to go to university. He has two sons whom he has encouraged to acquire 'modern' knowledge. The eldest son has now reached Sekolah Menengah Pertama (SMP; secondary school) level and, when at school, lives in Parung Kuda near Sukabumi, the district (kabupaten) administrative centre. The younger son is at the Sekolah Dasar (SD; elementary school) in Ciptarasa. The younger boy has an ambition to become an engineer, or a helicopter pilot. In support of his son's ambition Abah agreed to build a model of a helicopter as a tutumpakan for his son's helaran circumcision celebration. A tutumpakan is a kind of a float carried by about six people, and is traditionally a sisingaan, a lion (see figure 2.1).

¹¹ The examples of the Taman Mini Indonesia (Hitchcock 1998) and the Tengger people (Hefner 1983) demonstrate different aspects of the cultivation of 'traditionalism' in Indonesia, the first through traditional architecture and the latter through ritual, both of which are important for the Kasepuhan.

Figure 2.1 Helicopter tutumpakan



However, SMP level education can only be afforded by a small number of households connected to high status. It is generally considered too expensive whilst most SMP are located outside the Kasepuhan areas. At the present time, and as far as I encountered them, there were two other children who had reached SMP level.

But this vision of what education might offer is handicapped by practical problems. In 1997 four houses for teachers were built at Ciptarasa using **gotong royong**.¹³ But because of the low salary offered and the isolated location of the school no teacher could be found who was willing to teach there. At first, the residents of Ciptarasa themselves provided additional income for the teacher in the form of natural produce, such as bananas, palm sugar and rice, but they could not continue this for long. At present there is only one teacher

¹² It is, of course, common for stability and establishment of power to be made possible and achieved through the invention or cultivation of tradition, as described by Hobsbawm 2000 [1983] for Europe during the period 1870-1914.

¹³ The word **gotong royong** here refer to the general meaning of the <u>gotong royong</u> used by the state, which can be simply translated as working together (or mutual assistance). Its obligations and arrangements, however, are variously employed (Koentjaraningrat 1961). According to Bowen (1986: 546) <u>gotong royong</u> forms an 'element of national Indonesian culture' as a result of a construction of national tradition – and it has been used as an ideological instrument for the mobilisation of labour.

for all classes (grades one to six), the husband of Abah Anom's sister. The head teacher visits only once in a while.

Abah Anom himself is a person full of contradictions. On the one hand he is known as a traditionalist, renowned for his supernatural powers. He is often asked to give advice on various matters, including healing, predicting the future and in relation to self-defense. Almost every day he receives guests from the cities, not only ordinary people but also government functionaries from Jakarta. His influence is certainly not limited to Kasepuhan and the surrounding areas, but spreads throughout the district and even to Jakarta. Many believe that he was one, amongst other dukun (customary ritual specialists), who provided Suharto with supernatural forecasts and advice. Therefore, it should come as no surprise to discover that candidates for local government administrative positions (e.g. Jaro, Lurah, and Camat) ask for his **berkah** (blessing), to enable them to win elections or secure nomination through his supernatural power. During the Indonesian political crisis of 1998-1999, when many Lurah were being attacked by crowds, Abah Anom gave local Lurah shelter. Outsiders are not willing or brave enough to oppose Abah directly, feeling threatened by his tenung (Ind. guna-guna, sorcery). 14 Owners of petrol stations and shops at Pelabuhan Ratu, the nearest city on the south coast, and even some in Sukabumi, know him personally and decline payment for the merchandise which he buys, such is the awe and respect in which the Kasepuhan and he personally are held. In 1998, Indosiar, a private television station which broadcasts nationally, interviewed Abah and asked him to predict the outcome of the then current economic and political crisis.

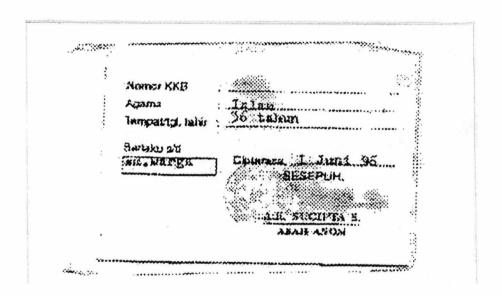
While Abah Anom is famed for such traditional virtues and mystical power, he is also a symbol of modernism. Someone who knows him only by name or reputation might well be surprised on first meeting him. He is very different from the usual image of a leader of a traditional community. He is neither old, nor outstanding in any particular way. Except within the village, among his people, or while participating in traditional ceremonial activities, he looks more like a young urban man with all the appropriate style markers. He wears black sunglasses, carries a mobile phone, and drives a jeep that has been customised according to the latest fashion. He also owns two radio stations, one in Pelabuhanratu and

¹⁴ On the contemporary relevance of sorcery in Indonesian public life see, for example, the regional studies of Howe (1984) on Bali, Watson (1993) on Sumatra, Bernstein (1990) and King (1976) on Kalimantan and Jordaan (1985) on Madura. Some more general issues relevant to official attitudes and the relationship between sorcery and civil society are covered in the book edited by Watson and Ellen (1993).

another in Sukabumi. To communicate with his assistants in the villages he uses three citizen band radios. He also has an aerial (URL) telephone, which was presented to him by one client in Jakarta, and which is still generally considered a very exclusive communication facility, which normally would only be provided for state purposes. For his people, Abah Anom, therefore, curiously combines the forces of tradition and modernity, the local and the global.

Kasepuhan leaders are aware that Kasepuhan identity is sometimes misused by outsiders, such as when some freely take food from city shops claiming that they are doing it on behalf of Abah. To avoid this kind of impersonation and fraud the Kasepuhan authorities now issue their own identity card, a kind of Kasepuhan Kartu Tanda Penduduk (KTP, Residence Identity Card, see figure 2.2), in addition to the KTP issued by the government.

Figure 2.2 Residence Identity Card of the Kasepuhan



The Kasepuhan identity card was first issued in 1997 and by 1999 about fifty percent of Kasepuhan, declared by Kang Wahyu, the Kasepuhan **luar** who was appointed by Abah to administer the KTP, possessed such a card. The payment necessary for acquiring a card is 30,000 rupiah. A T-shirt with the 'Kesatuan Adat Banten Kidul' logo was also on offer at the price 15,000 rupiah. While the T-shirt is not compulsory, the Kasepuhan authority considers the KTP's charge very reasonable because it includes the cost of a photograph which in this case is subsidised by the Kasepuhan authority. Though this is not an obligatory payment,

people feel shame if they cannot pay it. But importantly, some Kasepuhan admit that they do not understand what the KTP signifies and what use it might have. Hence they express their objections by delaying their application. The Kasepuhan identity card can be revoked if the bearer is known to have violated Kasepuhan rules or has used the card for improper purposes, such as soliciting personal contributions. Thus, the Kasepuhan KTP shows how the technical bureauractic practice of the state can be re-deployed to give legitimacy to traditional identities.

In order to place Kasepuhan in the context of contemporary pembangunan nasional it is necessary to explain how and where the supposed contradictions of Kasepuhan life have been formulated. These formulations or expectations shape the quality and degree of interaction between Kasepuhan and other people. Not only is this true in an objective anthropological sense, but it is also the case in terms of the perceptions of non-Kasepuhan neighbours, the government and perhaps the Kasepuhan themselves. Although for the government, Kasepuhan agricultural practices are considered a constraint on development, their self-sufficiency in rice production has attracted the attention of many academics, and for this reason, their traditional practices have been the subject of various studies. Kasepuhan are also of value to researchers because their knowledge of the local situation and landscape, and reputation for magical power, allows them to enter TNGH forests and serve as guides and field assistants. Such a dependency on local people is related to widely held Indonesian perceptions of the forest as angker (a dangerous place), a belief which is discussed further in Chapter Five. In addition, Kasepuhan ceremonies are of interest to the wider Sundanese community, and attract tourists. Although the government seeks to change some Kasepuhan practices, it also needs Abah Anom and his influence as Sesepuh to help solve disputes, particularly those related to mining. The non-Kasepuhan communities, the majority of whom are Muslim, both those who live in the Kasepuhan area and those in surrounding villages, consider the Kasepuhan to be only 'KTP Muslim' 15, and really Sunda Wiwitan¹⁶, adherents to the old Sundanese religion, and therefore contrary to Islamic

¹⁵ Each Indonesians citizen is obliged to put one religion on the KTP (Residence Identity Card), which has to be one of those acknowledged by the State i.e. Islam, Kristen, Hindu and Buddha. Thus, for example, if someone has been labelled a 'KTP Muslim' it means that they are 'not truly Islam' but only so for KTP purposes.

¹⁶ Sunda Wiwitan (wiwitan = lit. 'origin') is believed to be the original pre-Muslim religion of the Sundanese. It centres on ancestor worship but in its development it has been influenced by both Hindu and Islamic ideas (Rosidi et al 2000).

teaching. This heterodoxy has led to some antipathy. Because of their un-orthodox practices and reported reputation for sorcery, neighbouring Muslims often hold Kasepuhan responsible for natural disasters. One non-Kasepuhan community leader, for example, explicitly blamed Kasepuhan when landslides occurred in area. Muslims refuse to eat the meat of animals slaughtered by Kasepuhan and will not eat Kasepuhan rice, both because the animals are not slaughtered according to halal principles and because rice is not grown according to halal practice. Nevertheless, Kasepuhan are seen by other local people, tourist agents and the government as a source of income, because they make the areas **ramé** (busy) by attracting outside visitors and tourists. Among other non-Kasepuhan Atang and Ade, ojég drivers, Mang Aja, a warung owner at Pangguyangan and Jaro expressed the view that through their popularity and renown in terms of magic and healing power Kasepuhan maintain strong relations with central government figures. In return Kasepuhan receive benefits in the form, for example, of money and new roads. Non-Kasepuhan who maintain relations with Kasepuhan, likewise receive government benefits.

Amongst the Kasepuhan themselves, opinion is divided on the present accommodations reached between tradition and modernity. Despite those who have benefited in various ways, for example by travelling, and have a wide network of external acquaintances, there were elders who objected to this development, considered it dangerous, **katerusan**, something which could easily get out of control. Involvement in a wider sense of development can thus be seen to move different sectors of the Kasepuhan population in different directions. There are those who easily and willingly follow the course of development preferred by Abah, but for others 'progress' and political compliance with Abah is not so simple, and these people in contrast with Abah's supporters, as a consequence of their opposition, run the risk of becoming increasingly disadvantaged by comparison.

Chapter Three

Kasepuhan Settlement and Society

3.1 Location and environment

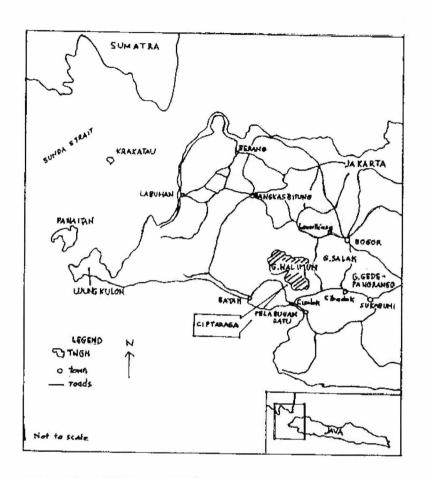
Ciptarasa¹, the Kampung Gedé (central village) of the Kasepuhan, is located in the southern part of the district (<u>kabupaten</u>) of Sukabumi, in the subdistrict (<u>kecamatan</u>) of Cisolok, and in the local administrative unit (<u>desa</u>) of Sirnarasa (figure 3.1).²

Figure 3.1 Ciptarasa and its location



¹ In 2001 Ciptarasa moved to Ciptagelar, a distance of approximately nine kilometers north-east of Ciptarasa.

² Indonesian governmental administration can be conceptualised as a pyramid (Watson 1987). The state is divided into 27 provinces, each headed by a Governor appointed by the President but responsible to the Minister of Home Affairs. Each Province is divided into several kabupaten (districts) headed by a Bupati appointed by the Minister but responsible to the Governor. Each kabupaten is divided into several kecamatan (subdistricts headed by Camat appointed by the Governor but responsible to the Bupati). At the village level there are local administrative units, kelurahan, headed by Lurah and – on a smaller scale – desa headed by a Kades, both positions being elected locally.



Adapted from: PHPA map 1994/5

There are three alternative routes to reach Ciptarasa: north, south and east. The most convenient is by the southern approach from the coastal town of Palabuanratu, along a steep, narrow and winding asphalt plantation road to Pangguyangan, a journey of about 24 kilometers. From Pangguyangan to Sirnarasa, a distance of about nine kilometers, the road has a compacted soil and rock surface, some parts of which are composed only of compacted soil and which are therefore unstable. Both Pangguyangan and Sirnarasa are served by rural public transport which runs at infrequent and irregular intervals. From Sirnarasa onward the journey must be undertaken on foot, along a steep pathway for about two kilometers. For those who are brave enough it is possible to **ngaboncéng ojék** (ride on the backseat of a rented motorcycle) directly from Pangguyangan to Ciptarasa. Alternatively, although it is about twice the distance of the direct journey from Pangguyangan to Ciptarasa, one can take a private car via Nanggerang along firstly a metalled road, and then along a

narrow dirt road carved from the sides of the mountain slopes with deep ravines on one side and steep walls on the other. However, on rainy days, due to the slippery state of the road, no local people are willing to use a vehicle along either of these routes and as the average number of rain-days in the area is high, overall Ciptarasa for all practical purposes is only accessible by foot.

The journey from Palabuanratu to Pangguyangan presents a panorama of tumpangsari.³ On that day in the dry season of July 1998 when I embarked on my fieldwork the air was hot and humid. The land around is covered with Imperata cylindrica and with Musa sp., Manihot esculenta, Durio zibethinus, Artocarpus heterophyllus and, Cocos nucifera against a backdrop of the Indian Ocean to the south; and a landscape of Pinus merkusii plantations, Agathis sp., Swietenia mahagoni, Syzygium aromaticum and Coffea arabica rises on the higher slopes to the north. Between Pangguyangan and Sirnarasa are plantations, which during the fallow period contain characteristic shrubs such as Lantana camara, Eupatorium pallescens, Etlingera littoralis and Alstonia villosa. The land use here is mixed, and includes kebon (un-irrigated gardens), sawah (irrigated rice fields), huma (Ind. ladang; un-irrigated rice fields) and talun (orchards consisting of various timber and fruit species) belonging to non-Kasepuhan. On approaching Sirnarasa there is a row of leuit (rice barns) which are distinctively Kasepuhan. Higher up, in the direction of Ciptarasa, there are rice terraces planted with the short high yielding rice varieties of the non-Kasepuhan and the taller local rice varieties of the Kasepuhan themselves.

Kasepuhan settlements are scattered around the border of the Mount Halimun National Park (Taman Nasional Gunung Halimun, hereafter TNGH) and amongst plantations, in a zone of between 700 and 1400 meters above sea level.⁴ The settlement area cuts across the boundaries between the administrative districts of Bogor, Sukabumi and Lebak, a pattern which is partly the result of the periodic and progressive movement of the Kasepuhan Kampung Gedé over some seven to fourteen years. The local annual temperature ranges from 18° to 26° C, with relatively high humidity. The word **halimun**

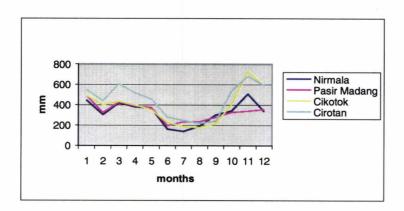
³ This is an arrangement in which farmers assist state-owned PERHUTANI plantations by planting and tending trees in return for which they obtain rights to cultivate crops, such as fruit trees, in between the seedlings for a few years.

⁴ Some Kasepuhan villages, following the Ministry of Forestry decree issued in June 2003, are now located inside the park. According to this decree, the area of the Mount Halimun National Park expanded from 40.000 ha to 113.357 ha to include the Gunung Salak area, which then become the Mount Halimun-Salak National Park.

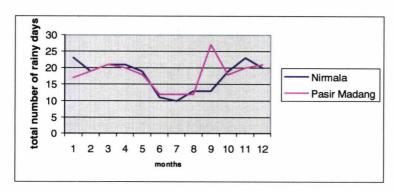
itself means cloudy or misty in Sundanese, referring to the fact that for most of the year the forests in its hinterland are enveloped in cloud. The climate of the area is monsoonal, and is one of the wettest on the island of Java, with an annual rainfall of between 4000 – 6000 mm/year. Rain falls all year with the driest periods occuring, on average, from June to August. The area has a total of 165 - 235 rain-days a year with surplus water amounting to 803.3 mm. Figure 3.2, adapted from BTNGH 2002, shows the average rainfall (in four sites) and rainy days (in two sites) each month. Nirmala has a total 3.889 mm and 212 rainy-days per year, Pasir Madang 4.608 mm and 227 rainy-days, Cikotok 4.608 mm, and Cirotan 5.265 mm.

Figure 3.2 Graph illustrating 1999 rainfall (a) and rainy days (b) in the areas of TNGH

(a)



(b)



There are some small landslides on steep settlement slopes and on **sawah** terraces due to the flow of water, especially during the wet season. There is also an increase in the river levels and flow during the **hujan gedé** (heavy rain) in the **tonggoh** (uphill areas). The colour of the water, especially in the Cisarua river near Sirnarasa, which flows fast from the upstream area, sometimes changes from clear to dark brown, even though there is no visible erosion. Rivers generally recover their normal flow again two or three hours after the rain has stopped. During the dry season of 1998-1999 most of the rivers flowed regularly, though some creeks were reduced to slow-flowing streams and to a sequence of stagnant pools in flat areas

3.2 Patterns of Kasepuhan settlement

Kasepuhan settlements develop according to a locally defined series of stages (cf. Garna 1984). The first stage is known as an **umbulan**. This involves only one to three houses. As more people arrive and the shared living environment grows from three to five houses, it is described as a **babakan**; and beyond this as a **kampung**, the common word used to describe village communities among Sundanese.⁵ The largest settlement, the final stage in this process, is the **kampung gedé** (lit. big village).

The name given to a **kampung** is usually taken from the name of a plant (e.g. Lebak Nangka, jack fruit valley), a particular site (e.g. Ciarca, **ci** = water, **arca** = statue), a river (e.g. Cisarua), or a name of person (e.g. Ciptarasa; Cipta is taken from Abah Anom's name, Sucipta, **rasa** = feeling). It may also derive from a distinct historical event. For example, Sirnaresmi was created after the Kasepuhan were forced into exile from Cicemet (the Kampung Gedé before Sirnaresmi) because the Darul Islam⁶ rebellion had reached there. Sirnaresmi is the conjunction of **sirna** (disappeared) and **resmi** (legitimate) meaning that Kasepuhan need not be afraid of Darul Islam anymore.

⁵ Iskandar (1998) describes how amongst the Baduy a saung huma (a shelter/hut in a huma rice field) forms the first stage of village development. In Kasepuhan a **saung huma** functions as a temporary hut near swidden fields where people stay during the busy periods of the agricultural cycle, but its development into a permanent village cannot always be assumed. See Hudson and Hudson (1967) and Koentjaraningrat (1967) for other cases similar to Kasepuhan.

⁶ Darul Islam was a rural rebellion during the nineteen fifties with the aim of proclaiming an Islamic state and which posed a significant threat to the existence of the existing state. It encompassed large areas in West and Central Java, South Sulawesi, South Kalimantan and Aceh. The rebellion lasted for about 10 years, but with the arrest of its leader, had weaked by 1962. 1976 saw renewed activity in West Java. See e.g. Van Dijk (1981) for a detailed account of this.

It is possible to show quite clearly how the present Kasepuhan Kampung Gedé Ciptarasa developed. However, since a **kampung** where the Kasepuhan leader, called Sesepuh Girang, lives is always associated with a special cultural and political meaning a sense of **gedé** automatically applies to Ciptarasa regardless of how many houses are present there. **Sesepuh** itself means elder, while **girang** means upstream.

In 1984 the Kampung Gedé moved two kilometers upland from Cisarua to Ciptarasa. This was marked initially by the planting of panglay (Zingiber montanum), and a series of other plants regarded as sarat⁷, ritually necessary in order to establish a kampung. The Bumi Ageung (literally, the 'big house') was repositioned on a flat site called tapak (lit. footstep) about 3,500 square meters in area. This involved the physical transfer of the original building. Approximately fifty percent of the original building was dismantled and carried piece by piece to the new site. The other fifty percent was carried in unison on the shoulders of a number of men. The Bumi Ageung must always face the sea, as it is the indung (mother) direction. To the south and to the east of the Bumi Ageung are open views, and to the north and west are hills. The Bumi Ageung is positioned above, in terms of the mountain terrain, village residences. It is located at the highest point in the surrounding physical environment, symbolically seeking to reach the upper world, which is also realised in both previous Kampung Gedé, at Cisarua and Sirnarasa. The Bumi Ageung is a place where Sesepuh Girang lives. At the back of the Bumi Ageung there is a building called the Pakemitan. The Pakemitan - kemit meaning guard - is a dwelling for the guard of the Bumi Ageung, but it is also used for storage (e.g. fruits and firewood). The Si Jimat (jimat = lit. talisman), a community rice barn, was moved and built at the side of the Bumi Ageung at approximately the same time as the Bumi Ageung. Reconstruction of these two buildings was completed in one day. Both the Bumi Ageung and the Si Jimat are ancestral buildings which are inherited from one Sesepuh Girang to another and are rebuilt as the Sesepuh Girang moves from one location to another.

The movement of the Bumi Ageung was accompanied by the movement of the houses of the Baris Kolot Indung, particularly the Urusan Jero who must move on the same

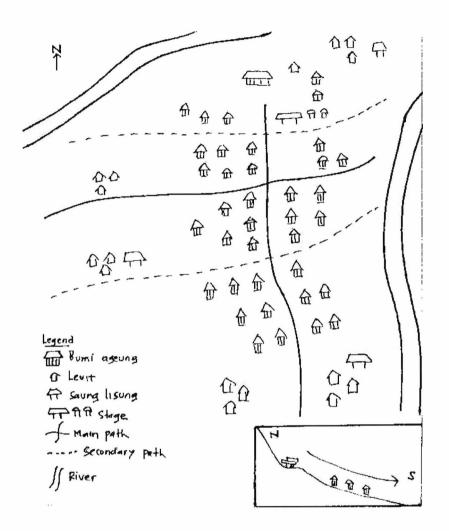
⁷ These are panglay (Zingiber montanum), sulangkar (Leea sambucina), palias (Pogonatherum paniceum), jawér kotok (Coleus atropurpureus), rendeu diuk (Staurogyne elongata), handeuleum (Graptophyllum pictum), darangdan (Ficus sagittata), lamé (Alstonia scholaris), ki téja (Cinnamomum nitidun), sasah (Aporosa frutescens), sauheun (Orophea hexandra), céngék (Capsicum pubescens), kanyéré (Bridelia stipularis), pacing (Costus sp.), surawung (Ocimum basilicum), calik angin (Mallotus paniculatus).

day. After this, other members of the community follow. But there is a rule that ordinary houses must not be built above (i.e. uphill of) the Bumi Ageung, as this would ngalangkangan, cast a shadow over Sesepuh Girang's residence. For Kasepuhan casting a shadow implies 'stepping-over' the head or walking in front of parents. Parents are respected because of their precedence in terms of origin and descent, and should not therefore be physically preceded. So, in terms of the spatial orientation obtaining in Kasepuhan, the Bumi Ageung is always referred to as tonggoh (lit. 'up') and not lebak (lit. 'down'), regardless of the exact physical position of a person at a given time, providing a 'unity between the 'spiritual' and 'physical' reality' (Cassirer 1953: 179). The ngalangkangan rule is also applied to other members of the community. Thus, a son or daughter's house is not allowed to overshadow that of the parents. Consequently, houses are always erected downhill of the Bumi Ageung. Through this arrangement the Bumi Ageung reflects its highest position, both in terms of physical location and social position. Social positions of power and authority are thus manifest through the appropriation and management of natural symbols and through the use of space. The Bumi Ageung dictates the orientation and developmental process for the Kampung Gedé as a whole (see figure 3.3).8

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⁸ The literature on the significance of settlement orientation (e.g. up-down, mountain-sea, left-right axes) in Indonesian societies is extensive though inconclusive (e.g. Christie 1978, Nordholt 1980, Hobart 1986). However, most analyses demonstrate a clear connection between physical displacement of a dwelling and socio-symbolic position. In the societies of eastern Indonesian and in Bali, with their strong emphasis on corporate descent groups and alliance, the ritual pre-eminence of a social group is strongly linked to the upper right hand sector of village space when facing uphill (e.g. Cunningham 1973, Covarrubias 1973, Hobart 1978, Swellengrebel 1984, McDonaugh 1985, Ellen 1986, Forth 1991). In the Kasepuhan case, as amongst the Baduy, symbolic orientation is linked to a cognatic social system and a strong sense of community egalitarianism.

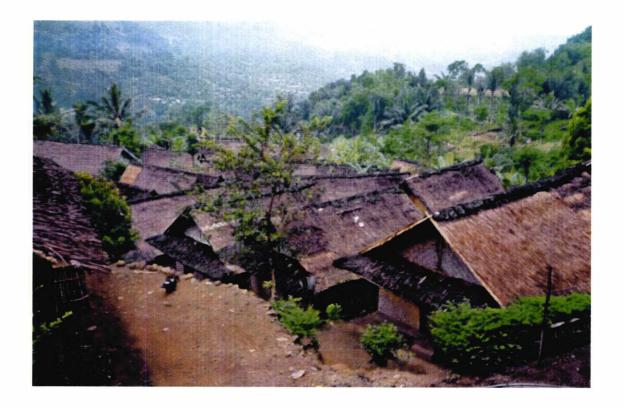
Figure 3.3 The arrangement of dwellings and other structures in Kampung Ciptarasa



Though facing the 'mother sea' is regarded as the best orientation for houses, the houses of both the Baris Kolot Indung and ordinary members of the Kasepuhan community do not necessarily do so (Figure 3.4). The houses are often built to follow the contours of the existing landscape along main, secondary and tertiary roads. They do not necessarily face each other and one house may face the back of another house. Where there are a group of houses, the open space between them is called the **buruan**. A **buruan** has extensive and important social functions. It is the places where **salametan** (a ritual to achieve a state of well-being) are usually held. It is also used as a general communal area, where children play, where adults can watch together, and where fruits, such as banana, are buried to ripen. If children are hungry they will be offered a meal at any house around the **buruan**. In these

ways the **buruan** reflects important characteristics of the Kasepuhan way of life, in particular a shared sense of community and mutual obligation.

Figure 3.4 Pattern of Kasepuhan houses



Each Kasepuhan kampung consists of domestic dwellings located towards its centre with rice barns forming an outer circle. Near the rice barns are the lisung (rice pounding morters) and the saung lisung (the 'house' erected over the morters), which are all communally owned. Kasepuhan say that the purpose of building the rice barns as on outer circle is to prevent mérang ('itching') caused by rice husks, but most importantly to protect the barns from 'danger from within', such as fire which might breakout from the centre of the village. Thus, risk-avoidance behaviour is built into the physical arrangement of dwellings. The barn (figure 3.5) contains the most important resource which Kasepuhan have; to lose a rice barn is regarded as worse than losing property of any other kind: 'harta mah bisa leungit ari leuit mah paragi urang hirup'. The incident narrated below reflects the general concerns Kasepuhan have as regards rice:

One afternoon in Ciptarasa, at about five o'clock, Mang Anda shouted from the direction of the rice field that some **pocong** (rice bundles) stacked on **lantayan** (bamboo racks) had gone missing. Some people, motivated by curiosity, came out from their houses and asked again for the more precise location. Some men went back to the rice field looking for evidence of the missing bundles and to check which rack it was. Noisily discussing the issue, they returned to the village. They concluded that there must have been a gap in the row of bundles on one of the Cisarua rack when they were stacked. The row in question belonged to Mang Kokon, who they could not find. Only Mang Kokon's wife, Bi Heni, was at home. As Bi Heni did not know anything about this, bundles of rice in rack being men's business, Mang Arsan, with some other men from the crowd, offered to help investigate. Some men also tried to find Mang Kokon. After about an hour, the men, together with Mang Kokon, came back to the village. They informed the crowd waiting for them, that there were no missing bundles. The gap, it was suggested might have been caused by naughty children, moving the bundles from its original position.

In most cases people share the rack, never count bundles, and only know what belongs to them by remembering the position of the end row. When there is a gap between bundles on any given row people might reasonably suspect that bundles have been lost or stolen. Losing rice is a major cause for concern, attracting much public interest. If rice theft were to be proven then the victim would conduct a **salametan**, a ritual to achieve a state of well being, with the aim of regaining the blessing (**barokah**) of the rice, and thereby preventing sickness in the family. Rice can be well considered a moral and spiritual entity. This kind of ritual involves making three different colours of **bubur** (rice porridge) to offer to **batara-batari** and the Karuhun. More importantly, people have to ascertain whether the thief is an outsider or comes from within the Kasepuhan community. If the latter, further serious action would be required. However, most of the time, people believe Kasepuhan would never steal, especially rice. Stealing rice, for the Kasepuhan, means the same as stealing humans.

The risks to which the rice barn is prone are not just externally induced. Indeed according to Kasepuhan the greatest risk are perceived as coming from 'within'. In relation to this example, again, we can see that internal risks are seen by Kasepuhan as more damaging than external risks. There is an important difference between internal and external risks, which is the extent to which internal risks are associated with human social relations, and external risks with forces external to the somewhat immediate social domain. The

significance of this internal-external distinction as we shall see later in this section is realised in Kasepuhan arrangement of space of their houses.

Figure 3.5 Kasepuhan leuit



Kasepuhan houses are built on stilts. Stilts raise the house, the abode of human beings, to a position between the upper world and the lower world, and display the symbolic importance of a mediating element (Wessing 1978, Ching in Muslimin 1999). Kasepuhan divide the universe into three levels – the upper, middle and lower – and this is reflected in the architectural division between roof, living space and stilts. As the ground represents the lower world, a house cannot be built directly upon it, or come into direct contact with it. The stilts, which are of equal length, as the land is first leveled before construction begins, raise the floor of the house about 50 centimeters above ground level. The space in between is covered, along its side, by wooden boards. These reduce up-draughts of air and keep the house warm. This space is regularly cleaned, as the wooden boards are removable. The walls are made of plaited bamboo, and the roof of *Metroxylon sagu* leaf thatch. The floors of the

front room are made of wooden boards, while the kitchen is made of bamboo or rattan matting. A house usually consists of two sleeping rooms, a living room, a kitchen, and an roofed open space in front of the house which is usually provided with a wooden bench. Within the kitchen is found a **goah**, a space where women prepare rice. Separated from other spaces in the kitchen by plaited bamboo, and next to the **goah**, is the **padaringan** where pounded rice is stored. Above the kitchen, again separated by bamboo matting, is an enclosed space which functions as a storage room mainly for garden products, such as coconuts and bananas. Clay construction supports the stove, which is also made of clay, at about 25 cm above the floor, so that the fuelwood can be placed below it. Hanging on the wall above the stove is a bamboo rack which is usually used for drying seeds and fuel wood. A front door leads directly into the front room, while a side door provides a separate entry into the kitchen. The side door is deliberately placed on the side of the house so that there is not a straight line between the front and the back door. This arrangement is said to prevent **rejeki nyeplos**, luck and wealth directly leaving the house.

Nowadays there are some modifications to this pattern. Some houses have a corrugated iron roof, a bathroom and a special guestroom with a set of chairs. In 1999 there were five houses in Ciptarasa which had a bathroom and six with a corrugated iron roof. Though corrugated iron roofing has some advantages, such as being cheaper, easier to obtain, and lasts longer than sago thatch, according to some elders it is, strictly speaking, prohibited, as it is thought to contravene **adat**. Clay roof tiles (common throughout the rest of West Java) are also forbidden in the Kasepuhan house, since this would mean placing the ground and the lower level of the cosmos above the upper level: human beings should not live under the ground (the lower world). Consistent with this cosmology, which states that the world of the dead is below the world of the living, is the location of human graves on land below the village. When water flows through a graveyard it becomes contaminated. Thus where houses are constructed downhill of a graveyard these houses are regarded as being contaminated by 'dirty' water.

In Kasepuhan thought the house is characteristically a female domain, as is generally the case for the societies of island southeast Asia (e.g. Jufry and Watson 1998, Janowski 1995, Carsten 1995). In Sundanese it is common to call a wife **patih goah**, the chief minister (of the house). But in comparison to other Sundanese (Wessing 1978, Adimihardja 1994) and Javanese (Rassers 1959: see esp. the essays 'On the Javanese Kris': 217-299, Keeler

1983), and also in contrast to many peoples of eastern Indonesia (e.g. Valeri 1989, Kana 1980), among the Kasepuhan there is a weaker emphasis on gender distinctions with regard to the house. However, the division based on the interior-exterior axis, also very widespread, is important here. The interior activities are concentrated in the kitchen. The kitchen is the place where the members of the family gather to eat, chat and to discuss family matters. Activities in the kitchen reflect what are considered to be internal household affairs. This symbolic axis is also apparent in the way the host or hostess considers their guests. If someone is received in the kitchen, this means that the guest is considered as an intimate member of the family and is no longer considered as a guest. Where intimate relations obtain, and, in Kasepuhan daily life generally, the side door, which leads to the kitchen, is used in preference to the main door of the house, while the front door is very rarely used. In contrast, the front room is the focus of all exterior activities and serves to entertain more socially distant guests in a more formal way. This is consistent with the interior-exterior division which we have already noticed for the village as a whole.

Un-pounded rice is considered to be symbolically aligned with exterior space consistent with the barns forming an outer circle round the village, while pounded rice is considered as symbolically aligned to interior space, consistent with it being stored in the **padaringan**. Since it is the abode of the rice goddess Nyi Sri, the **padaringan** is regarded as the innermost and most sacred part of the house, and is strictly reserved for females. Furthermore, although there are a number of variations, rooms in the house are generally arranged in accordance with the movements of the sun. The **padaringan** should not receive direct light from the rising sun although the kitchen as a whole may; consequently, the **padaringan** is built in the west part of the kitchen. Further, in accordance with the concept of **ngalangkangan** parents should sleep towards the sunrise. Their sleeping rooms are therefore placed to the east of those of the children. Through this arrangement, the west is thus associated with the interior (and femaleness) while the east is associated with the exterior, and as in the case of the mountain in relation to the village arrangement as a whole, the east and the mountain take symbolic precedence.

Also relevant to this account of the Kasepuhan interior-exterior axis are the movements of the sun and moon. Thus, the setting of the sun at **sandékala** (dusk) marks the start of the next day, in contrast to days in the western calendar which start from midnight. The appearance of a moon marks a phase of interiority which, by association with

the west, is female, while **balebat** (dawn) marks the return of exteriority. Thus, the initiation of the day (i.e. at dusk) is associated with femaleness, i.e. the mother. This, in turn, is linked to the spatial orientation of the house such that water flows from mountain to sea, towards the 'mother' and interiority, whilst the mountain, from where water rises, has associations of exteriority.⁹

The interior-exterior axis described with regard to the Kasepuhan house can also be seen in relation to the Bumi Ageung. The Bumi Ageung is divided into two parts, the private residence of the Sesepuh Girang, and the Bumi Rakyat. Consistent with the east-west axis symbolism, the residence of Sesepuh Girang is placed on the western side of the Bumi Rakyat. Furthermore, heirlooms are placed in the west part of the Sesepuh Girang's house. Thus the most sacred part is associated with the most westerly position, which is also considered to be the most interior point. The Bumi Rakyat is a communal house; every member of the community is allowed to stay there at any time and even to eat there if he or she so wishes. In between the residence of Sesepuh Girang and the Bumi Rakyat there is a space called the jambatan (literally 'bridge') which forms an imaginary bridge between the two physical components (figure 3.6). However, in this context, jambatan also has a meaning which goes beyond the literal and metaphorical sense of bridge: it is perceived as an enclosing space which expresses the close relationship between Sesepuh Girang and the warga (members). Symbolically, the jambatan provides the closest possible access to Sesepuh Girang and his potency, since his private residence is believed to be **suci** (purified) space, a place of heirlooms. 10 Guests who are regarded as close will be first received in the jambatan and will eat here instead of in the Bumi Rakyat, which is used to receive ordinary guests. When guests are invited and received in the jambatan this is an indication that these people are potentially regarded as baraya, family of the Kasepuhan (figure 3.6). If we translate these symbolic ideas into the language of risk management, we can see that by arranging their domestic space along an interior-exterior axis Kasepuhan establish separate

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⁹ Barnes (1974: 28 - 64) discusses the significance of the mountain among the Kédang in relation to the tradition of descent from leu-rian - the original village – so that the village is facing away from the mountain. The contrast of mountain to sea is reflected in the saying 'the mountain brought forth, the sea gave birth' (p.38).

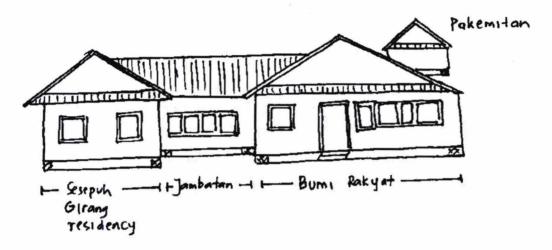
¹⁰ As in other parts of Indonesia (see e.g. Errington 1989, Waterson 1990, Carsten and Hugh-Jones 1995) ritual houses are often treated as if their main purposes are to protect heirlooms from one generation to the next, rather than to provide dwellings for people. In fact, it is in this context that we can understand how it is that the reified and anthropomorphized heirlooms came to embody the social and genealogical continuity of the human occupants.

zones of security and protection. But while the exterior space is given protection and things which require greater protection are placed in the most interior space, this should not be confused with the power associated with these zones. Indeed, while the most inner things reflect the most vulnerable they are also very significant and powerful. The following example illustrates this in terms of gender relations.

It was common for Mang Arna, Mang Aang, Mang Kokon and Mang Arta to sit together in Mang Kokon's house late into the night. On one occasion, they discussed the problem of Mang Arta, who that night had had to sleep in his neighbour's house. He had just quarreled with his wife. They concluded that although women in general were weak and in need of protection from men, in practice they were often powerful. This power is often exercised through food, which women control. Ki Karma, who joined the discussion later, said that men were very threatened by the power of women in their role as wives. Even a very **sakti** (spiritually powerful) man may lose his **daya** (power) to become **lumpuh** (powerless), when confronted with cooking tools such as a **céntong** (rice ladle). It is so easy to drive away men, show them kitchen tools, and they will run away because immediately they will be weakened 'lalaki mun disingsieunan ku parabot dapur, pasti lumpat kusabab matih, bisa langsung lemah'.

In both the **jambatan** and in the private residence of Sesepuh Girang, guests are entertained in the traditional way, e.g. **ngampar**, sitting on the floor; whilst in the Bumi Rakyat a sofa, table and chairs are provided for sitting and eating. Moreover, there are more restrictions and regulations regarding behaviour in the residence of the Sesepuh Girang compared with the Bumi Rakyat. Thus, in relation to an interior-exterior axis, 'other persons' or 'strangers' are by definition guests. From here on the term **sémah**, guests - in contrast to the term **warga** - will be used throughout this text to refer to someone who has no intimate relation with Kasepuhan, e.g. the non-Kasepuhan population of surrounding villages or city people.

Figure 3.6 Architectural division of the Bumi Ageung





3.3 Kasepuhan population and society

In 1994 the total population of the local administrative unit (desa) of Sirnarasa comprised 1,020 households and 4,183 people. Between 1987 and 1994 the population of Sirnarasa grew by 0.9% (INRIK and LEAD 1995), less than the 1980/90 national growth rate of 1.96%. The productive age is not easy to determine, firstly, due to the low level of literacy, and therefore the lack of accurate knowledge as regards birth dates, and secondly because even small children and elderly people may make a significant contribution to the domestic economy. White (1975), basing his research on the Javanese village of Kulon Progo, found critical economic benefits arising from the production of large numbers of children. Children are a source of potential labour. Even small children do tasks which themselves may not be directly productive, but which are necessary, such as taking cattle to bathe, herding goats or ducks, scaring birds from rice fields, caring for younger children and chasing away chickens from mats on which rice is left to dry. Their role is important, as it frees older household members for more productive labour.

In demographic terms, Sirnarasa is in some respects untypical of the Kasepuhan situation as a whole, as it also contains a non-Kasepuhan population. On the basis of data provided by the Pamakayan of the Baris Kolot Indung responsible for **ngajiwa** (censuses) and **tani** (agriculture), in 1998 the ethnic Kasepuhan population comprised 786 **umpi** (households) of 20,120 individuals. Each household usually has two children. Comparatively, this is low by Indonesian standards, but small numbers of children have been common among the Kasepuhan at least since the early 1960s. At that time there was no government birth control programme. Traditional herbal contraceptives and abortificients which are generally classified 'hot', were common and continue to be used. For example *Psophocarpus tetragonolobus* which is often supplemented by a hot spicy and sour mixture, e.g. of *Capsium pubescens* and *Ananas comosus*.

Kasepuhan warga are directly subject to the Sesepuh Girang, assisted by the Baris Kolot Indung. These positions are all hereditary. They include:

1) Pamakayan: the **dukun tani**, an agricultural ritual specialist, among other things, responsible for ensuring that agricultural rituals are properly conducted, such as those relating to the planting of rice. His responsibilities extend also to

¹¹ See e.g. Hull (1994) for an analysis of Indonesian population growth and of the national programme of Family Planning (Keluarga Berencana, KB).

- conducting censuses of people, animals and rice landraces. The present occupant is Ki Adria.
- 2) Tukang Tinggar or Pagar Pakaya: a pest fencer and chaser. The present occupant is Ki Urianah
- 3) Pangurus Leuit jeung Pusaka: the **urusan jero**, responsible for internal affairs. His duties include, among others, guarding the Bumi Ageung, looking after rice barns, cleaning the heirlooms, and determining the correct times for conducting ceremonies. The present occupant is Ki Karma.
- 4) Juru Pantun: the teller of **carita pantun**. ¹² The present occupant is Ki Radi, who also holds the position of Sesepuh Kampung for Ciptarasa, which means that he is also the Sesepuh Indung (the centre of Sesepuh Kampung).
- 5) Indung Beurang/Paraji Indung: a midwife and the official holder of medicinal knowledge. The present occupant is Mak Wok.
- 6) Bengkong Kolot: is **béngkong**, responsible for performing circumcision. The present occupant is Ki Ahina.
- 7) Panghulu Induk: responsible for rituals relating to religion, particularly those of the life cycle, e.g. preparing a corpse for burial and marriage rites. The present occupant is Ki Rahman.

The above Baris Kolot Indung act as mediators between Sesepuh Girang and the Sesepuh Kampung. The Sesepuh Kampung heads an individual **kampung**, where he represents the central authority of Sesepuh Girang and his assistants. There is one Sesepuh Kampung for each Kasepuhan **kampung**. The qualities necessary for occupants of these positions are that they be **luas** (open minded) and **koloteun** (wise). In the past old age has always been correlated with this position since the occupant was required to be an expert in traditional values and knowledge. But in recent years, as mentioned by Sesepuh Girang, being **luas** has been interpreted as also meaning being 'able to communicate with outsiders'. So now there are some Sesepuh Kampung who are much younger, indeed as young as 25 years. The decision as to who occupies these positions is taken by Sesepuh Girang. Another title acquired through inheritance is Tukang Kemit, the general assistant responsible for

¹² Carita pantun is a traditional oral presentation (Iskandarwassid 2000), often occuring in a ritual context. Carita pantun tell of the course of one's life while full of siloka (heraldry). Not all the story is told through singing. It is only the rajah (opening and closing) and nataan (descriptions and behaviours of the actors, or situations) which are sung. The dialogues are narrated.

maintaining the Pakemitan. One of his duties, for example, is to ensure the availability of fuelwood. Another official status is Panjaga Leuit, the guard of the Si Jimat community rice barn, occupied by the husband of the Indung Beurang. His duty is to monitor and to record the stock of unpounded rice in the Si Jimat community barn while the regulations and rules are the responsibility of the Sesepuh Girang himself.

Besides the formal roles and statuses listed above there are other persons, i.e. the kokolot (elders), who have an informal status and are traditionally acknowledged as being experienced and knowledgeable. There are also **ménak** (nobility), persons who have a traditional title e.g. **raden**, but the term also refers to someone who has acquired **gelar**, a title which shows their status. Therefore **ménak** is not only a traditional status, but is extended to those persons who have status deriving from their role in local government services, such as <u>kades</u>, usually called Jaro by the local community, <u>lurah</u>, <u>camat</u>, and <u>guru</u> (teacher).

Kasepuhan ideas of power and status are related to the concept of genealogical continuity, partly established through material substances, heirlooms (e.g. creese and/or sacred stones) and the ritual house (the Bumi Ageung). The possession by Abah Anom of the Bumi Ageung and the Sesepuh Girang's heirlooms is a demonstration that his status and the sacred physical objects are **katurutan**, inextricably linked, the one reinforcing the other. **Katurutan** means that two items, which were originally distinct (i.e. Sesepuh Girang and the heirlooms), must become one if they are to remain long and harmoniously associated. The **katurutan** is assessed in terms of **turunan** (descent) and its corresponding **kapinter jeung pangarti** (qualities, abilities and understanding of knowledge). Someone must be **kuat** (have sufficient strength) to bear the role of Sesepuh Girang. If the relationship is not correct then either the heirlooms will bring bad fortune (e.g. illness) or will disappear. This belief is illustrated in the case of Abah Anom's stepbrother:

The story begins in 1984, when the Kasepuhan central village was in Sirnaresmi. The Kasepuhan had to appoint a new Sesepuh Girang. But the Sesepuh Girang at that time, Abah Sepuh, had seven wives, resulting in disputes between the children as to who would succeed to the position of Sesepuh Girang. Though Abah Sepuh had said that Sucipta should be his successor, one of his sons by another wife protested and was not prepared to accept the appointment of

¹³ On the significance of heirlooms as symbolic power elsewhere in Indonesia see e.g. Anderson (1972), Mudjanto (1986: 113-116), also Rassers (1959: 219-297) on the Javanese 'kris'.

Sucipta. During this dispute, some Baduy, who Kasepuhan believe to be their turunan kolot (to have the same origin but to be older and take symbolic precedence), came and helped to resolve the conflict. As described by the Ki Juhi, Abah's advisers, after listening and taking advice from the Baduy, many of the kokolot (elders) were persuaded that Sucipta was the rightful person to succeed to the position of Sesepuh Girang. But the stepbrother was still dissatisfied. He took some heirlooms and created another Kasepuhan community where he could act as Sesepuh Girang. This newly created Kasepuhan group was called Kasepuhan Sirnaresmi. That he subsequently suffered from partial paralysis is thought by many people to be a kualat (curse) resulting from his action. This episode confirmed for many people that Abah Anom Sucipta of Kasepuhan Ciptarasa had the right katurutan, and conclusively showed that he was the right Sesepuh Girang. Because of this many Kasepuhan Sirnaresmi eventually changed their minds and supported Kasepuhan Ciptarasa.

Knowledge in Kasepuhan thought is divided into three hierarchical categories. The highest is **pribadi** (personal), then **salingkungan** (restricted), followed by **umum** (public). The right turunan (genealogical descent) is vital for acquiring pribadi knowledge, for example that of the Baris Kolot Indung. By the same token, pribadi in return legitimates a genealogical or acquired status and confers power. For example, the knowledge which accompanies medicinally useful plants is not freely discussed and is confined to the official Indung Beurang (midwife). Similarly, through his legitimated status, the Juru Pantun can influence the ideas of self among the Kasepuhan: selecting, modifying, and emphasizing those messages he wishes to deliver to his audience. According to some elders, the way the Juru Pantun tells a story is different from about fifteen years ago, particularly in the language used, speaking now with a smaller proportion of ancient phrases compared with more common phrases. To some extent this changes the meaning. Restricted knowledge is not considered as conferring much power as personal knowledge but it is knowledge which can be delegated and is a means by which higher authority may share knowledge with selected other person for strategic reasons. Possession of such knowledge brings prestige to those who hold it. Finally, there is public knowledge which is available to anyone who wishes to obtain it.

The idea of **katurutan** is reflected in Kasepuhan rules pertaining to land rights. There are four categories of land according to Kasepuhan customary law: **adat** land,

¹⁴ The Baduy practice of 'ancient' <u>adat</u> is acknowledged by the rest of the Sundanese as the historical predecessor of old Sundanese tradition (Wessing 1977).

seserahan land, tanah pribadi (private) land of Sesepuh Girang, and tanah pribadi (private) land of ordinary members. Rights in use of adat land is determined by Sesepuh Girang as befits his title and the stipulation that land be passed over to the future Sesepuh Girang in subsequent generations. Seserahan land is similar to adat land, but has a different history. It is land alienated by individuals for customary reasons, usually as a result of having made contracts with supernatural powers. For example, one plot of private huma land near Kampung Cisuren has diserahkeun (been given away) by Mang Odi for the use of adat. He in return would receive benefits, e.g. good yields from other plots of his agricultural land. One household in Kampung Situmurni gave away two plots of their private sawah land to adat because one of their daughters has long been ill. Their daughter was subsequently cured. People believe they must free themselves from teu katurutan, what does not suit them. The private land of Sesepuh Girang is land which is inherited from his ancestors and is separate from his position as Sesepuh Girang. Members of the community feel they have a duty to work, ngahiras, on the adat, seserahan and private land of Sesepuh Girang, though strictly speaking the produce belongs to Sesepuh Girang. Ngahiras is neither reciprocal nor involves payment. The Sesepuh Girang only provides meals (and cigarettes) for the workers.

Kasepuhan concepts of personhood are, on the whole, open and flexible. There is a prevailing sentiment of collective access. Doors are rarely locked. It is acceptable to use other people's belongings and seek permission afterwards, for example tools such as axes or hoes which are generally left outside by the side of the house. It is also permissible to pick food, such as young coconuts or bananas, from someone else's land when feeling thirsty or hungry during a journey, and it is expected that people will only take as much as they need. A strong adherence to the idea of **rasa éra** (feelings of shame) acts as a powerful sanction, encouraging people to do the right thing, and to follow social rules. Someone who misbehaves is called **teu boga kaéra** (a person with no shame; Ind. <u>tidak punya malu</u>), a status which all seek to avoid. ¹⁵ But despite this strong sentiment of collective identity and suppressed notion of individuality, individual resistance is evident. Thus, it is common, and generally acceptable, for people to slip on whatever sandals are immediately available when needed, but this only holds so long as the sandals are returned to the place from where they were taken. But people often express their fear of losing their sandals and not finding others

¹⁵ Public shaming, <u>malu</u>, as a form of social control is widespread in Indonesia. See e.g Van Vollenhoven 1981:212, Ter Haar 1948: 214-6.

to wear, and having to go out bare foot. Mang Utar said that he purposely wears a pair of non-matching sandals (of different colours, say, between left and right), which he surmises might sometimes deter other people from using them. The sandal example is trivial, but nevertheless powerfully demonstrates an underlying acknowledgement that there are recognised limits to permissive sharing. In other situations people employ a variety of 'indirect' strategies to prevent other people from using their belongings. For example, while it is considered mean to put an axe inside the house, and therefore make it unavailable to those who might wish to borrow it, some people remove the handle and thus prevent its use by others in this way.

Circumcisions, marriage feasts, births and funerals are among the important focal points for Kasepuhan reciprocal aid, silih. Guests' contributions, panyambung, are recorded. Near to the time of the festival it is usual for one of the household's relatives or neighbours to offer to serve as Panjaga Para, the guard of the storage room. As the guard of loft he has to record all incoming contributions based on who, how much, and in what form the contributions are made. This record will be then used by the household concerned when returning what they have been received, mulangkeun.

Communication between residents of a Kasepuhan village is facilitated by a pattern of settlement that allows them to interact intensively. Since house walls are made of woven bamboo, and houses are built close to each other, people often chat with their neighbours from within their own kitchens', sharing news and gossip. Information exchange between people is also facilitated through a **pancuran**, common public water source, bamboo conduits which tap water from the river. The **pancuran** is a place for bathing, washing clothes and kitchen tools, and is a source of water for general household purposes, such as for cooking. At least twice a day (in the morning and in the afternoon), first women, and later on men, gather at the **pancuran**. The kitchen of the Bumi Ageung is another place where women share information. Even when not actively cooking, women assemble here to chat and be sociable.

Men and women cooperatively undertake household duties. Jobs are usually distributed on the basis of physical appropriateness. We can illustrate this division of labour and daily routine with the example of Mang Kokon's household. Early in the morning, usually at about half past five, Mang Kokon rises and goes out. He does his routine jobs: checks his **kebon**, **huma** and **sawah**, cleans his agricultural tools and, if necessary, looks for

fuelwood. It is best to collect fuelwood very early in the morning, as PERHUTANI officers, who might regard fuel wood collecting as an infringement of Forestry Department regulations, are rarely up at this time. Sometimes his son Arna, who has graduated from primary school (Ind. Sekolah Dasar, SD) and is now 17 years, helps him. But Arna has three buffalos, owned by the mother of Sesepuh Girang, Emak Sepuh (sepuh = old), which have to be continuously tended throughout the day. So for most of the time Mang Kokon is alone. Tending these buffalo for Arna is important. His ambition is to have a buffalo of his own through the maro system (maro means making it half). Under this arrangement, he will get half of each new born buffalo, but, according to custom, he has to wait until the buffalo has two, four, six, and so on offspring, to benefit from his maro rights. At about nine o'clock Mang Kokon returns home for morning meal of, very often, fried banana while having a cup of coffe and spending a bit of time for smoking. After his meal he liar (goes out) again to look for non-routine jobs, hanging around the village. In other words, he goes out without any exact plan of what he wants to do. He might incidentally find, when hanging around, work for which he can offer his labour, for example at the Bumi Ageung. By doing this he would not feel éra (shame) if, afterwards, he brought home some food from the Bumi Ageung in return. Sometimes there are outside guests to be looked after at the Bumi Ageung. This might lead to a money payment, usually of about five thousand rupiah per guest, for services such as giving information about the Sesepuh Girang, for example, about his current moods and habits, such as when he usually wakes up, and what kind of payment clients offer Abah. Guests, especially the new ones, are always interested in gossip, not only concerning the Sesepuh Girang but also other clients. During the agricultural season, Mang Kokon's activities are more carefully planned. But this is the time when guests also often arrive, especially researchers and those interested in the Kasepuhan way of life. For the guests this is a good time to see and observe directly Kasepuhan practices. So, for Mang Kokon, as someone who is locally well known and often asked by guests through Sesepuh Girang to accompany them, this time poses conflicts of interest for him in terms of time allocation. He must maintain a good relationship with guests, obey the instructions of Sesepuh Girang, and take care of his land. Finally, on the day in question, he decided to do half and half with the consequence that part of his land should be worked by wage labour. But he only does this for **sawah**. He prefers to work **huma** by himself.

For Mang Kokon's wife, Bi Heni, the day starts much earlier. At about half past three she lights the stove for cooking rice. The morning meal for the family has to be ready before half past six at which time, after morning meal, Arna leaves with food to lead the buffalos, and on days when her daughter has to be ready for school, which starts at seven o'clock. Some mornings, while waiting for the rice to cook, Bi Heni can clean the house, then go to the pancuran to wash kitchen utensils and clothes, and to bathe both herself and her five years old daughter, Tika. After securely wrapping the food for her husband's meal, she goes to the house of one of the relatives of Sesepuh Girang, perhaps that of his mother, brother or sister, depending on what work is available, and to gossip. Bi Heni may assist there with some of the domestic work. School classes usually finish at eleven o'clock, after which Tika either joins her mother or plays with her friends. There is not too much pressure among Kasepuhan children to undertake chores. Of course, there are children who tend buffalo, care for younger siblings or work at the field hut, but this is as much playing as working. They can stop whenever they get bored. During the planting season, Bi Heni is usually accompanied by Tika, joining her husband on their land at about ten o'clock. She brings food for her husband and those batur neighbours or relatives, who help them in this work. Meal is usually at around eleven o'clock, for midday they are forbidden to work, as it is the time for Batara Kala, the god of time. While Mang Kokon hoeing the soil, Bi Heni weeds the dykes of the plot using a small hoe. Bi Heni returns home earlier than her husband, who follows at about four or later depending on the job being undertaken. The most important consideration for someone working late is to go home when the sun tunggang gunung, rests on a western mountain ridge before sandékala (dusk) so they do not kaburitan, arrive home after dark. The onset of darkness increases the possibility of bad things happening, such as being attacked by malevolent spirits. At about three in the afternoon, Bi Heni starts to prepare food again in order for this to be ready for the evening meal at six o'clock. When there is a big ceremony, a time when women are usually busy preparing food for large numbers of participants, men may also cook, look after children, or even pound rice for family needs.

From around five o'clock in the afternoon most people begin to relax. At this time the turbine is turned on, supplying electricity to the village, and Ciptarasa becomes alive with the sound of, mostly, **dangdut** music. Each person with a radio seems to like to turn the radio up as loud as possible, so that it is heard in neighbouring houses. Some people express

their distaste for this noisy environment, but when they complain receive only a bashful smile it means that the music will continue at the same volume. So it is better just to accept it. For some people this is also a time for watching television. In Ciptarasa, during the period 1998 - 1999, there were ten households which owned a television: the Bumi Rakyat, the Tukang Bangunan (building constructor) Mang Arta, the Tukang Urus Sasatoan (animal carer) Mang Kandi, the Penasehat (adviser) Abah Ki Juhi, the SD teacher Pak Guru, the two brothers of the Sesepuh Girang, the mother and stepmother of the Sesepuh Girang, and, of course, the Sesepuh Girang himself. Having a television is a luxury. Due to the remote location of Kasepuhan, each television also needs a parabola. Those who do not possess a television gather at one or other of these ten houses. Women and little children take their turn first. This is the time when children's programme are screened, such as the comedy film 'Jin and Jon' which is quite similar to the western film 'I Dream of Jeanny', or the '008' which tells about a young girl who turns into a hero along the lines of the 'Power Rangers' film. On certain days at this time there are also soap operas, such as 'Esmeralda', a Mexican production. Esmeralda is the favourite film among women. At six o'clock people will usually go home for an evening meal and then later, at about seven thirty, may return to watch television again, mostly Indonesian soap operas such as 'Diantara Dua Pilihan', 'Tersanjung', etc. Most of these concern intrigues, love affairs and disputes about wealth among rich families, and are famous for their glamorous actors and actresses. Men generally prefer to chat or play dominos unless there is an interesting film on the television, an action film, or perhaps, the news. It is clear from the space I have devoted to television, that it is an increasing preoccupation and influence in Kasepuhan lives. Television in turn affects the way Kasepuhan perceive their natural environment in the context of the world around them, and their perception and response to environmental risk, which will be described in Chapter Seven.

Divorce, particularly among younger Kasepuhan, is frequently observed and might be said to be the norm. In a case of divorce, or if there is a quarrel between husband and wife, it is common for the men to move out from the house. There are many women who have been married several times. The daughter of Mang Absor was only married for two weeks before she divorced. Though many reports of divorce are little more than rumours, they are often accepted as being true. As regards marriage, the most important thing is to be blessed by Sesepuh Girang. It is up to the individuals concerned whether there is a civil ceremony and registration. Divorce is understood as a process by which the wife is diserahkeun (given back) to her parents.

Not all Kasepuhan are **asli** (original or autochtonous) in the sense of having Kasepuhan parents and ancestors. With the permission of Abah Anom, non-Kasepuhan may become Kasepuhan, if they wish to do so, but with the obligation that they practice **huma**. In the case of marriage between Kasepuhan and non-Kasepuhan, a couple must decide whether they wish to follow Kasepuhan adat or not. In cases where the persons are not originally born Kasepuhan they are described as Kasepuhan **luar** (outsiders). Atang, an **ojég** driver from Pangguyangan, said that becoming Kasepuhan would lead to an abundant rice supply but his parents would not be pleased if he converted.

Kasepuhan descriptions of kinship are consistent with the general Sundanese pattern (see Sumamihardja 1984). In the Kasepuhan worldview the Karuhun (ancestors) occupy an important position. They are the ones who live in the upper world and who can mediate between deities and the living. Not all ancestors are Karuhun, only those who have died more than seven generations previously, and who have therefore entered the upper spirit world. Kinship terms apply to these seven generations ascendent and descendent from Ego. Those dead who can be addressed with a kinship term are (by definition) still in the lower spirit world, and their graves are still visited, such as in the **ngembang** (periodic pilgrimages), which will be discussed in Chapter Four. Karuhun graves are not necessarily cared for, and have, in a sense, 'returned to nature'. It is only because certain Sesepuh Girang are considered **sakti** (supernaturally powerful) by many people, including non-Kasepuhan, that their graves are still maintained and visited, such as the celebrated graves at Cipatat and Talaga.

The Kasepuhan daily staple food is rice which comes from their own land. Unlike the Baduy (Iskandar 1998), where **huma** rice is only grown for ritual necessity, Kasepuhan grow both **huma** and **sawah** rice for daily consumption and do not usually have to subsidise this through the market and imports. Raw salt is an essential accompaniment of rice, Kasepuhan believing that without salt they will get ill. Kasepuhan vegetables are harvested from **kebon**. They include *Ocimum basilicum*, *Cucumis sativus*, *Melastoma malabathrium*, and *Solanun melongena*. In surrounding agricultural fields are also found *Spilanthes acmella*, *Pilea glaberrima*, *Erechtites valeriannifolia* and so on, which grow spontaneously. The forest is also a source of vegetables such as **iwung** (young bamboo shoots), *Pangium edule*, *Ptychosperma kuhlii*

and various mushrooms and ferns (e.g. Diplazium esculentum). Fruits are usually obtained from **kebon** and **talun**. The main source of animal protein is domestic livestock, such as chickens. Fish and shellfish collected from fishponds, from sawah fields during the fallow period, and from the river, are also important. Nowadays, instead of using a bubu (a traditional fish trap made of bamboo) some warga use electrical stunning techniques to catch fish in the river, but many warga oppose this practice as it is indiscriminate, killing many immature fish. As a consequence fishing in this way only occurs in places remote from the village. This practice is also prohibited by government. Meat is eaten only on special occasions and is unaffordable for daily consumption, except for a small number of households. Since wet rice fields are rain fed, without elaborate irrigation, fish are frequently in short supply during the dry season. Moreover, fresh fish is considered more important as a source of cash than as food. Kasepuhan depend on the market for other foods, such as instant noodles (e.g. 'Supermi') - their favourite food, salted fish, fish paste, and other food sundries such as cooking oil, salt and sugar. Most of them are bought in the local small shops or from itinerant merchants. The daily diet of most people consists of rice, salt, and vegetables, cooked using monosodium glutamate to enhance the taste.

Most Kasepuhan production, consumption and distribution is entirely within the subsistence sphere, and depends on mutual cooperation rather than monetary transactions. It is difficult to obtain accurate statistical data to establish whether output is sufficient to fulfill needs, an issue which will be pursued further in chapter six.

3.4 Kasepuhan identity and perceptions of history

A literal translation of the term Kasepuhan is 'elders', and can be considered a generic term relating to a traditional way of living. These people would not have immediately adopted nor been labelled Kasepuhan. Indeed, Kasepuhan today insist on calling themselves Kesatuan Adat Banten Kidul, the nearby non-Kasepuhan calling them Kasepuhan. The word Kasepuhan derives from **sepuh** meaning 'old', and as we shall see in the next chapter, this is a reference to the Karuhun (ancestors) who play an indispensable role in the life of all Kasepuhan people.

For Erwina (1997), Kasepuhan are a traditional community of south Banten, descended from an official of high status in the fifteenth century Sunda kingdom of Pakuan. Sunda Pakuan were attacked at this time by the Islamic Sultan of Banten and many

subsequently escaped to the mountains, developing a set of traditions known as Adat Banten Pakidulan. Erwina considers Kasepuhan to be part of an Islamic heritage. However, in their own historical accounts, Kasepuhan assert that they originally moved from Bogor to Gunung Halimun following the fall of Padjadjaran in the 16th century. Bogor itself, according to Ki Karma, is derived from the word **bokor** meaning 'palace'. These early descendents were high status Bareusan Pangawinan, who did not want to convert to Islam with the majority of the Sundanese elite, and in response fled to the mountains where they were outside direct state control (Adimihardja 1992:19, Ricklefs 1981:35). Thus the claims of these authorities, and also of the Kasepuhan themselves, contradict the account we have from Erwina.

In one narrative compiled by Ki Baju Rambeng in 1908, there were those who killed themselves rather than acknowledged Banten rule whilst others fled to the west and south, to Gunung Kendeng and Halimun. The neighbouring Baduy population is regarded by Kasepuhan as as their **turunan kolot** (older descendents). Baduy advice was decisive, as we have seen for example during the dispute over the election of the Kasepuhan Sesepuh Girang (see p. 70-71). Iskandar (1998: 167) writes of how Baduy, by practicing swidden, are outside 'control of the state'. As traditional states, the colonial state and the post-independent state have played an increasingly prominent role in supporting the infrastructure for irrigation and in encouraging people to plant wet rice, so people practicing swidden agriculture are increasingly those who are, and who in some sense seek to be, outside of direct state control.

In their adoption of wet rice Kasepuhan see themselves as having an historical affinity with the Javanese. According to Ki Karma, Javanese words and phrases are present in every single **jangjawokan** (spell) connected to **huma** rice cultivation, in ways which do not necessarily occur elsewhere (e.g. in wedding ceremonies). These Javanese words and phrases, at least in the several spells that Ki Karma told me about, formed the first part/episode of this particular discourse. According to Wibisana (pers. comm.), words and phrases that form the first part/episode of the spell should be considered the oldest part of the spell. In his opinion, Kasepuhan claims might well be right.

In the Kasepuhan version of history, as in the historical records for Sunda, a dispute which took place in the mid fourtheenth century between the king of Sunda and the then ruler of Madjapahit stands out as an important episode in Sunda-Jawa relations. This dispute is referred to by historians as 'the Bubat affair', and is referred to in Kasepuhan narratives as the **perang** Bubat, the Bubat war. Prior to the Bubat affair Madjapahit and Padjadjaran coexisted as equals. The story is as follows:

Soon after ascending the throne Hayam Wuruk asked the King of Sunda for his daughter in marriage. The King is very pleased at his daughter being chosen to become the first wife of the mighty ruler of Madjapahit. He himself with a splendid retinue brought the princess to Bubat, north of the city of Madjapahit. When they arrived King Hayam Wuruk and his royal uncles were intent to set off immediately to meet them. Gadjah Mada, Hayam Wuruk's chief minister (patih) was not happy with this arrangement and suggested that the king should wait and should not lower himself to meeting a vassal. Gadjah Mada's influence pervaded and the young king agreed. Rumours however spread in Bubat as to a breach of promise. Sundanese patih Anapakén accompanied by some officials and armed men made their way to the capital. There Anapakén announces that he has come to arrange matters and that after that the ships carrying the gifts will sail upstream and his master will carry out his intention of coming to receive the king as son-in-law. Gajah Mada replies with cold contempt and personal insults to the envoy that this is not what he expects from a dependent country' (Zoetmulder 1974: 424). Gadjah Mada proposes that the gifts be accepted as a token of submission and that then the King of Madjapahit will accept the princess as a gift. This interchange almost results in an immediate fight, stopped only through the intervention of court Brahmin Smaranata. The Sundanese delegation replies that a final decision will be given in two days. They return to Bubat with both the acceptance and realisation that there will be no peaceful settlement.

The King of Sunda resolves to die as a true ksatriya to his mantris who declare they will follow him. Envoy along with 100 men arrives at the Sundanese camp. They bring with them the same terms which again are not accepted. In the resulting battle many Madjapahit warriors die. The Sundanese are however finally annihilated. The King of Sunda falls after a valiant fight against the kings of Kahuripan and Daha. The Queen asks her daughter to precede her in death and ask her father to wait for his wife on the perilous journey to the realm of the dead. The princess then stabs herself. The Queen and other women follow

The story above is often told by Kasepuhan. Further investigation of the significance of the story may help to explain why Kasepuhan keep the old practice of **huma** and why they differ from present Javanese while apparently experiencing good relations prior to the Bubat affair. Thus, though it is not necessary to recount in detail Sundanese history – as the history itself is often disputed – it does serve to place Kasepuhan identity in a wider spatial and historical context, and helps us understand how the Kasepuhan perceive themselves.

Chapter Four

Kasepuhan Conceptions of Nature

Chapter three demonstrates how Kasepuhan descriptions of the world and their ceremonial cycles connect with their perception of risk, and why this should be. Chapter one showed how through the development of technology, the use of internal metabolism was gradually replaced by external metabolism. One Consequence of this development is generally thought to be human separation and domination over nature. How we conceptualize nature depends on how humans act in the world, a relationship which the present chapter attempts to explore.

4.1 How Kasepuhan describe the world

In terms of Kasepuhan belief, the universe is divided into three parts: the buana luhur (upper world), the buana tengah (middle world), and the buana handap (lower world). Human beings live in the middle world, but cannot separate themselves from other inhabitants of the universe, both those who live in the alam batin, the invisible spiritual realm, and those who live in the alam lahir, the visible physical realm. The spiritual realm largely relates to the inhabitants of the upper and lower worlds. The upper world is the abode of Gusti, identified with the Muslim god Allah, Karuhun, batara Guru, Batara Wenang and other lower ranking batara-batari (gods and goddesses). The lower world is reserved for dead humans and other spirits. The physical realm largely relates to the (human) inhabitants of the middle world, and is divided further into three levels: the alam éling (conscious world), the alam hirup (moving world) and the alam cicing (silent, non-moving world). Human beings belong to the highest level of the physical world, the alam éling, which indicates that they have kaéling/pangarti, consciousness/awareness and understanding. The moving world, by contrast, is the realm of all moving things, such as animals, water, earth, wind and fire; while the lowest level, the silent, non-moving, world, is the realm of things which do not move, the plants and the soil in which they grow. It is important to note that this division is not based on a contrast between living and non-living¹, but rather on the capacity of the entities concerned to move and be conscious. Hence, animate things of creation include not only plants and animals, but also other inorganic substances and objects. Although hirup literally means 'life' in Sundanese, the alam hirup refers to the capacity of its

components to move. Earth belongs to the moving world because it can move, as in earthquakes and land slides, which are an ever-present reality in the part of the world where the Kasepuhan live. By contrast, soil does not move by itself.

These divisions are not static, but dynamic. The contents of the three alam can move from one alam to another. For example, boiled water in a kettle has moved from the moving to the silent, non-moving, world. The action of boiling 'kills' the water and through being confined in a kettle water also loses its capacity to move. More significantly, a biological human that does not have consciousness or awareness, for example a jelema gélo (a mad person), is no longer considered to be a human being. It is said 'he is not a human being, but an animal without consciousness'. Consequently, following the Kasepuhan definition, human beings and human persons must be seen as distinct entities, where 'being' refers simply to the human biological organism, while 'person' refers to people with kaéling/kamanusaan, consciousness/humanness. This, of course, is consistent with recent theoretical discussions in anthropology as regards the relationship between biological individuality and 'personhood', where in the latter the person is determined in terms of his or her consciousness in relation to society as a whole (Carrithers 1985, Taylor 1985).

As regards the relationship Kasepuhan have with the inhabitants of the upper world, though Kasepuhan admit themselves to be Muslim, Gusti has little direct influence on peoples' lives, and Muslim prayer rituals and fasts are rarely observed. The majority of Kasepuhan practice Sunda Wiwitan, and it is through the practice of Sunda Wiwitan that Kasepuhan distinguish themselves from other Sundanese, the majority ethnic group of West Java, who first adopted Islamic practices during the Demak period in the early sixteenth century (Schrieke 1957), and whose culture now retains only remnants of Sunda Wiwitan. Batara-batari and Karuhun are of more practical, everyday, and immediate, importance for the Kasepuhan, who maintain close relations with the upper world through the conduct of salametan. Consistent with the notion of indung (mother) as a cosmological centre, and its association with interiority and sunset, salametan events are determined through observing the appearance of the moon. At every full moon Kasepuhan conduct a salametan, familiarly called opat-belasna (lit. the fourteenth day of the month). This ceremony should start at midnight, and a combination of a full moon and midnight are considered the most auspicious time for this ritual, since the combination represents the culmination of the alam: of the moon

¹ Such a contrast is common in some cosmologies and is reflected in descriptions of folk classifications of

and the night, and of the 'mother' and the invisible world.

In the opat-belasna the Sesepuh Girang prays to the Karuhun and to the batara-batari, thanking them and asking for their blessing by offering rujak (fruit salad) and kuéh (cakes and biscuits).² There are many batara-batari in the upper world and there is no one single dominating power. The batara-batari are believed to have come to an understanding amongst themselves as to what appropriate interventions should be made with regards to the lives of humans. Mang Kokon and Mang Arta explained to me on one occasion the contract made between Batara Guru ('guru' literally meaning teacher) and his son Batara Kala, the god of time (kala = time) concerning the regulation of time:

Once upon a time there was a woman who was bathing in the sea. Batara Guru accidentally flew over her and became sexually aroused. As the shadow of Batara Guru passed over her she became impregnated and gave birth to a son. However, Batara Guru did not want to recognise him and the baby was abandoned. When the child grew up he returned and claimed his rights. An agreement was made in which Batara Kala was given the right to make his living at certain times, which were the days of Jumaah (Friday) and Ahad (Sunday), the **balebat** (dawn), the **tengah poé** (middle of the day), the **sandékala** (sunset), the **tengah peuting** (middle of the night), the months between Méi (May) and **serah taun** (thanksgiving, early August), and during **ponggokan** (a two-week period when human work on the soil is completely prohibited). Outside these periods he was not permitted to disturb humans.

the world (see e.g. Taylor 1990: 47-51).

² Rujak (spicy fruit salad) should comprise seven kinds and colour of fruits (depending on which season they are available), and depending of whether they are dagingan (fleshy) or not, and a combination of lada (hot), pahang (a kind of bitterness), haseum (sourness), amis (sweetness). In order to achieve an appropriate combination of seven kinds, colours and tastes, a bit of ground chili, some salt (uyah) and some of brown sugar (gula semut) can be added. Meanwhile young or mature fruits are selected to give range of an effect of different colours and tastes. Each fruit is mashed and poured into seven different glasses. On one occasion I recorded the following ingredients: Carica papaya, Annona muricata, young Mangifera indica, Persea americana, Eugenia javanica, Ananas comosus, and young Cocos nucifera. At other times the ingredients may include Artocarpus integer, Bouea macrophylla, Citrus aurantiifolia, Punica granatum, Citrullus vulgaris, Annona squamosa, Passiflora edulis, and Morinda citrifolia. The kuéh (cakes and biscuits) also come in a mixture of seven kinds, mostly sweet such as dodol (rice-flour boiled with palm sugar until sticky, then rolled), salty rangginang (cooked glutinous rice arranged in a round flat form and dried under the sun), sweet bolu (a kind of cake made of rice or wheat flour), sweet wajit (glutinous rice and palm sugar boiled and stirred until thick and afterwards wrapped in corn leaves), salty kiripik (a kind of crisp, made either of rice flour or cassava flour), sweet apem (steamed fermented rice flour), different kinds of sweet papais (cassava/rice flour cooked with palm sugar and filled with various fillings, such as bananas, wrapped in banana leaves, then steamed), sweet sagon (coarse glutinous rice flour mixed with white sugar and rasped coconut then put in a thin layer in a pan and baked), sweet ladu (rice flour boiled with palm sugar until thick, left until cool then covered by raw rice flour). The preconditions for preparing rujak are more exacting than for kuéh, as during the preparation of rujak a woman should be in a 'clean' condition i.e. not during her period.

³ Kasepuhan use the Western calendar (the **poé** and **bulan biasa**) in addition to the use of five **poé pasar** (lit. market days) following the Javanese pattern – Legi, Pahing, Pon, Wagé, Kliwon, and the twelve months of the Islamic calendar: Muharam (Muharram), Sapar (Safar), Mulud (Rabiul-ula), Silih Mulud

Batara-batari thus periodically descend from the upper to the middle world, such as when Batara Kala and his army till the soil at appointed times in order to make a living as agreed with Batara Guru. **Batara-batari** have the ability to make themselves tangible in the middle world, such as in the form of **manusa leuweung**, ghostly 'forest people', or alternatively may exercise their power through the agency of a **jelema pinter** i.e. a person with the ability to cure diseases or to avert attacks of pests on plants.

Kasepuhan describe batara-batari as resembling humans in many ways, and their actions can be made sense of in human terms. Like humans, they can be angry, make mistakes and be motivated by evil desires, even when they are reckoned in general terms to be 'good', such as the case of Batara Guru, discussed above. But batara-batari cannot be easily reached or approached. Their abode in the upper world is regarded as remote, a place where they have become separated from humans, with whom they have no direct communication. In this situation humans must continually endeavour not to violate the various contracts and arrangements made amongst batara-batari. By contrast, Karuhun are thought to be deukeut, more intimately connected to human beings, and more easily accessible.

Kasepuhan argue, however, that through living in the world humans face many problems which make it difficult for them to maintain the most desirable path. At this point it is Karuhun who channel Batara Guru's teaching to human beings as these have been laid down in 'Tatali Paranti Karuhun' which in turn guide the Kasepuhan towards wisdom and the lampah nu bener (righteous path) in the middle world. By keeping on the righteous path bancana (hazards) can be avoided. In 1998-1999, at the time of my fieldwork, the Sesepuh Girang was Sucipta, popularly known as Abah Anom (abah = father, anom = young), alluding to the fact that he is like a father whose advice must be strongly heard. Kasepuhan believe this person has been designated by Karuhun as a receiver of uga and wangsit, revelations and signs, and an interpreter of all those messages which for more than 600 years have been enshrined in ancestral laws and regulations of the Tatali Paranti Karuhun, which is summed-up in the popular saying, 'Obeying Batara Guru and not Batara Wenang', 'ngagugu ka Batara Guru, lain ka Batara Wenang'. The reason for this is that while Batara Guru is associated with guru, guidance and wisdom, Batara Wenang is associated with wenang and kuasa, power and authority. Thus since Batara Kala has been given the right to make his living through tilling the soil in particular places, at certain periods of time it is forbidden for humans to work on

(Rabius-sani), Jumadil Awal (Jamadiul-ula), Jumadil Ahir (Jamadius-sani), Rajab (Rajab), Rewah (Shaban),

those pieces of land, as this would infringe the rights of Batara Kala. It is also the Karuhun who originally recommended that houses should be raised on stilts, in order to allow such things as worms, ants and the earth to 'breathe' and so not 'eat' the house. Such sayings suggest that following the righteous path, and the attainment of wisdom, are more important than the pursuit of power and authority, and that Kasepuhan, with Karuhun guidance, should be willing to share their living environment with others. As we shall see in the next chapter, it is through his interpretation of the divine messages emanating from the Karuhun that Sesepuh Girang makes decisions about, and thus influences, Kasepuhan relations with the socio-cultural and physical environment. These interpretations and their implementation constitute and characterise the leadership principles of Sesepuh Girang.

As dictated in the guidelines set out by the Karuhun, humans must at all times consider the batara-batari, as the nu ngagaduhan (owners) of creation in both the alam hirup (moving world) and in the alam cicing (silent, non-moving, world). The term 'owner' here is used in the sense that creatures can be considered to be under the guardianship and protection of the batara-batari, who have given all things their special physical and spiritual characteristics. These characteristics have to be taken into account when considering and describing peoples' lives. For example, some plants are considered beneficial in that they protect people from malevolent spirits and other dangers, such as those planted when a kampung is first created, as discussed in Chapter Three. There are plants which are regarded as panas 'hot', such as Erechtites valeriannifolia, and others as tiis 'cool', such as the Carica papaya. This hot-cool distinction common in the medicinal classification of plants more generally in Indonesia and elsewhere⁴, is linked to the equally widespread classification of plants as, respectively, pohaci (female), associated with coolness, and méga (male), associated with hotness. For example, among the kakaian⁵, woody plants, the Michelia montana is said to have female characteristics. Thus, since a house should effect merenah (coolness) it is associated with Michelia montana, which has female characteristics. In contrast, Altingia excelsa is male. Appropriately, while Michelia montana is considered good for house construction, Altingia excelsa is not. However, some other plants do not fall into this category, the planting of which is buyut

Puasa (Ramadan), Sawal (Shawwal), Hapit (Zil-quida), Rayagung/Haji (Zil-hajja).

⁴ For example, the rule on Madura that 'cold' plants are appropriate to treat 'hot' illnesses while 'hot' plants are appropriate to treat 'cold' illnesses (Jordaan 1985).

⁵ Kasepuhan classify the plant world into three broad groups i.e. woody (**kakaian**; **kai** = wood), non-woody (**jujukutan**; **jukut** = grass), and vines (**ngajalar**; **jalar** = vine); This is similar to description given by Conklin [1955] among the Hanunoó.

(forbidden) for certain **terah**, lines of household descent. For Mang Ardan's household planting *Coix lacryma-jobi* is **buyut**. In general the **buyut** rule is only applied for seven generations after the time it is enforced. The **buyut** comes into force whenever there is a 'broken' relationship between a particular household with other inhabitants of the universe e.g. because of wrong conduct. For Mang Anda it is forbidden to eat the meat of **mencek** (*Muntiacus muntjak*) as it is believed that his great grand father had wrongly killed this animal.

There are other practical ways in which humans can maintain good relations with batara-batari. For example, activities which affect other non-human entities are often preceded by asking the relevant entity 'to come along'. One afternoon in late 1999 Mang Ojat was cutting grass while quietly **ngawih** (singing a folklore song). The singing is intended to 'cheer-up' the grass and subsequently, when the cut is made, it will not be so painful, preventing it from complaining to its guardian batara-batari. Similarly, according to Wibisana (1998, personal comm., 2000b), the Kasepuhan Juru Pantun (storyteller) will ask a zither 'to accompany' him. This differentiates Kasepuhan from other traditional Sundanese, who generally ask batara-batari directly when seeking spiritual support, rather than addressing a particular physical entity. By engaging in behaviour considered appropriate to a particular task, and having secured spiritual support, people can then act without fear of misfortune, even when confronted with signs of 'dangerous animals' in the forest, such as the scratches allegedly made on stone by tigers.

If a person violates any rules of ownership specified by the **batara-batari**, then he or she, or even the community as a whole, has to bear the consequences. These consequences, usually in the form of penalties, do not emanate from the Karuhun, as their role is merely to act as guides, and to exemplify the rules, not to punish. Thus Mang Kokon, who works part-time as a tourist guide, told me that 'punishments come from **batara-batari** who feel that their rights have not been properly observed'. Take, for example, the case of Batara Kala. Kala is associated with time and the passage of events as set forth by Batara Guru. When, for example, Batara Kala and his army are working to

⁶ Wibisana (pers. comm. 1999, 2000b) says that the rajah (the opening or the closing) of carita pantun in the Priangan region of West Java in general is a kind of request for protection and a presentation of apologies, directed at the ancestors and the actors whose names are mentioned in the carita pantun i.e. the juru pantun is communicating with invisible things which have a superior position. This is different in Banten and Sukabumi, where the rajah bubuka (opening) is just a sign from the juru pantun that he will start the carita pantun, and the rajah pamunah (closing) a sign that it is ended.

make their living, people should make way for them by not working themselves during these periods. If not, their clash with Batara Kala will result in some kind of disaster, such as an attack of evil spirits (e.g. jin and siluman), or the destruction of rice by rats, or the *Lonchura leucogastroides* bird. It is Batara Kala who punishes the violators. Other (non-human) beings not complying with the rules set down by the **batara-batari** are also punished. For example, Ki Karma once told me that in the past there had been a very wild and troublesome Gibug (kind of a soil snake) which as a consequence of his bad behaviour was punished and turned into stone.

A central underlying principle of the Kasepuhan belief system is that there should be unity and harmony between the upper, middle and lower worlds. It is the duty of human beings to seek unity and to achieve rasa manunggal (feelings of oneness), summed up in the popular saying 'tilu sapamilu, dua sakarupa, hiji éta kénéh', 'three types, two kinds, but only one' (cf. INRIK 1995). The mystical aim is to eliminate the separation between self and other, and between subject and object. This idea is reflected in the syntax of the Sundanese language, of which Kasepuhan speech is a variant, where, in any one sentence, the position of the subject and object is often not important (Rosidi 1984). For example, the sentence 'ti barang jung, teu eureun-eureun; atuh barang nepi téh gebrus mandi am dahar, terus guher baé nepi ka isuk', literally translates as 'after departs, does not stop, when arrives takes a bath and eats, then sleeps till morning', where both subject and object are ambiguous. We can see the same effect in the phrase 'clom, kunyunyud, giriwil', which refers to the activity of a fisherman, but which only indicates the movement of the hook being thrown into the water, being caught by a fish and the fish struggling on the hook. The subject and object are implied, and understood only in the minds of the storyteller and the listener.

In the Carita Parahyangan (written in the sixteenth century), for example, the text 'disilih ku Nusiya Mulia', 'replaced by Nusiya Mula' should be understood as 'Sang Nulakendra disilihan ku Nusiya Mulia', 'Sang Kulakendra is replaced by Nusiya Mula'. This kind of subject omission is currently still found in Sundanese sentences (Wibisana 2000a: 4). The idea of wholeness, of the merging of self and other, subject and object, are not, of course, confined to Kasepuhan. In Javanese culture humanity is only a jagad cilik (small part) of the jagad gede (eternal cosmic life) in which the ultimate aim is to

⁷ I do not entirely agree with the INRIK translation (1995:29). It is true that 'tilu sapamilu, dua sakarupa, hiji éta kénéh' is similar to the idea of 'three types, two kinds, but only one', however the explanation that 'although people have various wishes, postures and characteristics in this universe, they all come from 'the One', the Almighty' is doubtful. I rather prefer to consider that this Kasepuhan expression simply describes the idea of unity.

manunggal, become one and achieve unity (e.g. Magnis-Suseno 1984:16-121, Darmaputera 1982, Koentjaraningrat 1985). The Javanese concept of ngesti refers to the process of seeking to unify all the power of the individual, and to direct it towards a single end, rasa, where God can be found (e.g. Geertz 1960, Mulder 1978, Beatty 1999, Soebardi 1975). Similar ideas are found in other Asiatic mystical traditions embodied in Hinduism and Buddhism (e.g. Tambiah 1984), and are also evident in many cosmologies of animistic peoples throughout the world, and are likewise represented in European mystical and folk traditions and in contemporary mainstream Western society where the main focus is reaching upward toward an experience of union with something described as the One is sought (e.g. Smart 1995).

In this view the world is described in terms of spiritual forces and powers, including those associated with humans, which are interconnected by systematic cause and effect, and which seek to live together in harmony. This is essentially the basis of what is described more widely as 'animism' (e.g. Bird-David 1999, Morris 1987). Hidding (1935: 135), speaking more generally of Sundanese culture, noted that 'understanding about something means to know the place of that thing in the whole and its relationship with the other parts of the whole. Nothing stands alone'. Thus, Hidding is here arguing that Sundanese (and therefore also the Kasepuhan) view the world in a holistic fashion. This way of thinking is quite opposite to a reductionist scientific approach. In this latter approach understanding of something involves an understanding of its parts in ever more detail, with eventual recourse to some notion of a fundamental unit e.g. atoms, electrons, nucleus, protons and so forth. In classic, functionalist, scientific ecology the components of a system are material things, like water, plants and animals, and in human ecology also human beings, woven together into an eco-systemic whole by the flow of information, matter and energy (see. e.g. Odum 1971, Hardesty 1977). In Kasepuhan ecology the components also include non-material things which have force and hence also an energy equivalent. In both cases the energy itself cannot be seen, but only the effects are visible, such as a falling stone moved by the invisible gravitational force of the earth or someone falling ill because of a violation of the invisible force linked to the contract between batara-batari, batara Guru and his son Batara Kala. No wonder, therefore, that Kasepuhan have often been portrayed, and indeed portray themselves, as having a close relationship with their natural environment, though in this sense the cosmology which underlies this view is in many respects the same as that which many in the environmental movement have identified with native Amerindians and others who

'tread lightly on the earth' (e.g. Hughes 1983, Callicott 1989, Reichel-Dolmatoff 1976).

The idea I have been exploring above attempts to encompass not only the physical dimensions, but also the spiritual realm of Kasepuhan society, and as such the boundaries extend to what can be best described as 'the cosmos'. In this study the physical boundaries of the Kasepuhan ecosystem correspond to what I describe as Kasepuhan territory. However, this has never been physically mapped and as time passes other entities can be seen to encroach into their territory, e.g. the Cikotok Mine and the Mount Halimun National Park. Chapter Five will discuss these issues in more detail.

Information, matter and energy flow are the basic constituents of the Kasepuhan world, like any other. These are dimensions through which change can be observed or in some sense measured. Education, radio, television and tourism help promote new attitudes, change ideas and affect behaviour. Kasepuhan receive substantial revenue through engagement with broader Indonesian state initiatives. This includes clearly orchestrated presentations of ritual ceremonies for a culturally interested Indonesia and an international audience. A flow of matter from outside the Kasepuhan system, such as new landraces and the use of fertiliser, is increasing. It is thus evident that Kasepuhan conceptions of the world are not static, but are changing in response to interactions with other states and populations. However, these realities and processes are legitimated by Kasepuhan through the interpretation of various signs⁸ (e.g. **uga** or **wangsit**), which connect the material to the spiritual world.

Kasepuhan conceive of the world as moving through eight pre-destined cycles. Each usum (era) has its own perbawa (character). These cycles are predicted by the Karuhun and transmitted over generations through siloka (symbolic or hidden stories and expressions), which exemplify particular characteristics. For example, several informants told me that they believed the truthfulness of the siloka, 'engké mah indit saratus balik sapéngki', 'in the future many will go, but only few will come back'. This siloka was told to them by their elders while they were still young. The truthfulness of this siloka has now become evident to them when they see the migration of many people, including Kasepuhan, to work in the gold mines at Pongkor, as only a few have returned. In 1998 many Kasepuhan believed the world to be experiencing the sawindu alam sangara (eight-year fierce world cycle) an era characterised by disasters and

⁸ I distinguish here between sign and information. Signs cannot stand alone: they only convey information when connected to other meanings from the same context (see Leach 1976). Thus whilst the Kasepuhan world is continuously changing on account of a number of factors, Kasepuhan continue to read and make sense of this world through interpreting signs which - it is said – have been given to them by their Karuhun.

bloodshed.9

Kasepuhan describe the universe as moving in cycles, and as being in a constant state of change. It is these relentless processes which are perceived as the cause of events. Nothing, it is said, can prevent something from happening when the time has come. Human beings have to accept the cycle of life and the apes (misfortune/failure) or java (good fortune/success) it brings. The world is not constant, lastari (Ind. lestari; immutable). Lastari in Kasepuhan thought refers to a grave, something that has been passed, which is no longer changeable in terms of alam lahir. Besides the cyclical characteristics of alam, Kasepuhan also believe that alam proceeds linearly. They believe that sometime in the future the land they live on now will be destroyed, that the number of people will grow and that mountains will be deforested. They say 'we do not know what kind of alam will exist, those who live here will be different, though we do not know in what form and way'. For example, the impression in stone of a huge human foot at the top of Sanghyang Mountain has been taken as evidence of the situation of alam in the past: in this case for the existence of a past human species, in the form of raksésa, giants, different from modern humans; it is very probable that these people were also very sakti (powerful). Kasepuhan also believe that in the past, before the mystical order of the Prophet had arrived, all animals were able to speak and think like humans, as indicated in the story of Sakadang Peucang (the mouse deer) which describes and imitates the human world. 10 The changes in the alam are considered a consequence of ugana, a kind of destiny. Human beings are only in a position to ensure that the cycle follows an appropriate path, not to change the uga. Within the constraints of the framework given by the Karuhun, human beings can select technological strategies through which to achieve the best outcome. The universe is thus cyclically selfregulating in which the linear paths of human beings are perpetuated.

Each alam has its own sajarah (lit. history). As Kesepuhan put it, 'boh éta jang ka hareup, boh katukang, sajarah nu geus sering dicaritakeun', 'whether for the future or for the past, it is history as has often been told'. Thus, sajarah does not only refer to the past, but also to the future (cf. Rosidi et al 2000). For example, Kasepuhan sajarah tells

⁹ In accordance with the cycle of **taun**: Alip, He, Jim, Je, Dal, Be, Wau, Jim Ahir. The combination of **taun** and **usum** (e.g. Adi, Kuntara, Sangara) is used by Kasepuhan to explain and describe a situation at any one time, or **alam**. However the knowledge to determine the **alam** is exclusively owned by a particular person (e.g. the Sesepuh Girang or the internal affairs officer, the Urusan Jero).

¹⁰ The mouse deer stories are found elsewhere in the islands of South East Asia and in the Malaysian Peninsula (Epskamp 1987). The first written versions appeared on the Malaysian Peninsula in the 18th and on Java in the beginning of the 19th century. In Indonesia up until now it still forms a popular oral tradition; in the Kasepuhan case elders use the moral of the stories for educative purposes.

lawang (stone door) which people describe as taking the form of a rarangan awéwé (vagina), is prophesied to close in accordance with ugana, that is when tos kedahna (it has to be) and when tos waktosna (the time has arrived). The Cisuren, Cimaja and Cirangrang rivers at present flow underground through the mountain, but when ugana has arrived this passage will be closed causing the upstream Cimaja area to be flooded, an event which has to occur. Such events will be preceded by a sign, for example, as Mang Absor suggested, when the *Mangifera odorata* in Ciawitali Entrusted Forest flowers. When this happens the Ciawitali forest should be opened up and its resources used. As yet the Limus tree in Ciawitali has never flowered.

It is within this scheme of Kasepuhan awareness that the encapsulation of humans through the cyclical nature of **alam** that **sajarah** can be understood. Figure 4.1 presents a comparison between how Western populations and Kasepuhan conceive time. In Western concepts of historical time, events connect in a linear fashion: from A (the past) through B (the present) to C (the future). A, B and C are separated. In contrast, Kasepuhan have a concept of time in which the past (A) and future (C) both emanate from the present (B). Thus, for Kasepuhan, the past is connected and ontologically equivalent with the future. Thus, to forecast the future is as much **sajarah**, as remembering the past where the past constitutes and acts as a model for the future.

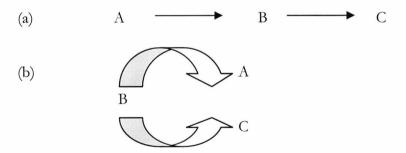


Figure 4.1 a) The Western linear relationship between past (A), present (B) and future (C). (b) Kasepuhan concept of time, in which past and future are connected. The upper arrow (B to A) represents looking into the past, while the lower arrow (B to C) represents looking into the future.

4.2 The ngahuma ceremonial cycle

The Kasepuhan practice of **huma** (swidden cultivation) which I shall describe further in Chapter Six can only be understood through the concept of **sajarah**. By this I mean that the combination of ideas and practices surrounding **huma** and the way in which they 'unfold' over time, are in part made meaningful in myths which recount the origin of the relationship between people and rice, for example in the story of a girl named Simeut Calumpang as told by Mang Kokon:

Once upon a time there was a mother and her little daughter who lived in a remote area of the forest. The little child was hungry, but there was nothing to eat. There were no tubers. The mother did not know what to do. She tried to find some plants.

At the same time as this was happening the dead body of Nyi Sriyani from **kahyangan** in the upper world had to be buried on the earth. This is part of a much longer myth about Nyi Sri, whose hand in marriage is sought by Batara Guru.

With the utmost effort, the mother at last found the plant she wanted, which was growing from the body of Nyi Sriyani. The mother cleared a bit of forest to prepare a piece of land, and she planted what she had found. Meanwhile, her daughter was crying continuously, asking for food. The mother, nevertheless, continuously tended the plant. After several months the plant ripened, and the little girl ate. After which she fell asleep, because her stomach was full.

The Simeut Calumpang myth underlies the Kasepuhan belief that although it took months for the plant, which we now know as rice, to ripen, its **barokah** (blessing) saved the life of the little child. In the story the plant is subsequently named Nyi Sri, and since that time rice, **nyarengan**, has accompanied and taken care of the lives of humans. Rice 'should not be thought of as a god, but it should, nevertheless, be taken good care of, 'teu meunang di pigusti ngan kudu di pusti-pusti'. This 'taking care of Nyi Sri through the practice of **ngahuma** by Kasepuhan is legitimated with reference to the **lalakon** of Nyi Sri, a **lalakon** being an episode in one's life through time and space. The **lalakon** of Nyi Sri is the **lalakon** of life, the **lalakon** of an individual, and the **lalakon** of ourselves. It is the **lalakon** which determine a person's path of life. For Kasepuhan, therefore, the conduct of swiddening, even on a small scale as part of some wider mode of subsistence, is a mythically sanctioned obligation, and central to their religion and worldview (cf. Iskandar 1998). Mang Kokon further described to me how the physical characteristics of rice metaphorically configure human reproductive physiology. Thus, rice seeds contain a white 'liquid' which he described as **pejuh** (male

¹¹ Among the Javanese the lalakon is told through wayang kulit, a shadow-theatre with puppets made of leather. It is performed behind a translucent screen in front of light so that the puppets' shadows are cast upon the screen. The shadow (Ind. <u>bayangan</u>) is not just a shadow in the physical sense but a metaphorical reflection of the object or person which castes the shadow.

¹² Lilir is a word which describes the state of a person at the time they are just about to wake up. It is also the name of recently planted rice which has begun to show first signs of life. Similarly, the word **gumunda**

sperm). This white 'liquid' which is, in fact, the flour, can be observed when young rice seeds are rubbed with the fingers. The seeds remain open until midday waiting to be fertilised by the wind. After midday the seeds will close. In order for rice to mature it is necessary for the seeds to **disiangan**, to be fertilised by wind of just the right strength. This must be neither too strong nor too weak; otherwise the seeds will **teu beuneur**, not ripen properly.

The symbolic huma cycle to Kasepuhan cosmology, and therefore to their understandings of the natural world and the risks it poses for them, and how the natural environment is intrinsically linked to social practices and human conduct, becomes very clear in an examination of the individual stages in the cycle. In the remainder of this chapter I shall look at the stages in the huma cycle through a detailed ethnographic record of the events of 1998-9, starting with the ponggokan and serah taun festivals, and then proceeding to the ngaseuk (planting), mipit (harvesting), and finally culminating in nganyaran (the rituals for first consumption of rice).

4.2.1 Ponggokan

The year is 1998. It is mid-July, and a two-week festival, the Kasepuhan ponggokan, is taking place. This is a time when soil should be 'resting', a time when farmers do not work at all on the land. This is also a time when the Sesepuh Kampung (Council of the Kampung Elders) gathers at the house of Sesepuh Girang in Ciptarasa. During these two weeks each Sesepuh Kampung has to report to the Pamakayan of the Baris Kolot Indung about the situation of each kampung. The report includes kampung population figures, number of households, animals, rice barns, and the occupations of residents. This census data is required to determine how much each kampung must contribute to the serah taun ceremony, the biggest public ceremony of the agricultural cycle. Furthermore, each Sesepuh Kampung has to calculate what contribution each household in their kampung must make to the overall cost. Though the contribution can be made both in the form of money and raw materials, such as rice, coconut, bananas and sugar, some kind of financial contribution is expected, varying between 1500 and 3000 rupiah per adult person. How much each household pays is based upon the material wealth of that household measured in terms of the occupation of its inhabitants, the number of animals and rice barns owned and, to some extent, in terms of the size of the new rice harvest, in relation to the number of adult persons in

is used for a pubescent girl and for a rice plant that is near to flowering. Each stage describes a particular

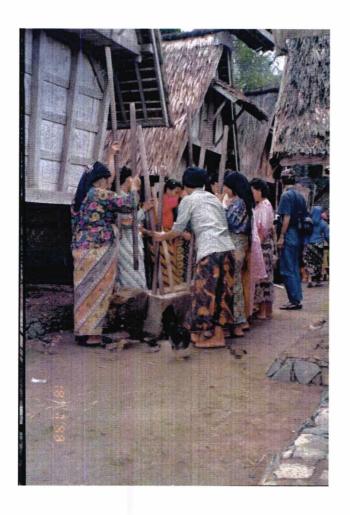
the household. These calculations are based on self-assessment. Someone who feels rich enough to pay more than that which has been requested by the Sesepuh Kampung may do so in order to avoid shame or in order to enhance his social status. The village authorities stress that it is up to individuals themselves to contribute what they want as, during the ceremony, they are permitted to consume food in the Bumi Rakyat, or to use the facilities (such as the stage or handicraft shop), regardless of the contribution they have made. But the use of these facilities, and the right to use them, seem not to be evenly distributed amongst members of the community. The collective product of community contributions is enjoyed more by guests than by residents, that is than by Kasepuhan themselves, who prefer to stay at the houses of ordinary people.

While all this is taking place people, mostly men, start to decorate their houses, and more importantly, the Bumi Ageung, as well as the kampung more generally. Some fetch bamboo haulms, while others fetch thatch made from the crown leaves of the sago palm Metroxylon sagu. They build a stage for ponggokan, entertainment performances, and for exhibiting handicrafts. As Abah is the architect of the stage it is he who instructs people in its construction. The bamboo haulms are partly taken from Abah's own garden, but are also donated by warga. On one occasion while this was happening, some PERHUTANI officers showed up, and rumours circulated that they were collecting money payments for that bamboo which they thought had been harvested 'illegally'. Whatever it was that went on, however, it did not interrupt the building of the stage. A lot of sago thatch is required to make this kind of stage, and each Kasepuhan household from surrounding villages must contribute two pieces of thatch. However, at the present time the thatch is not easy to obtain, fewer palms being planted than in the past. Some households without access to sago palms, and who do not want to put up with any further hassle and can afford it, simply buy thatch at 600 rupiah per piece. Other warga, such as Ki Dudung, object that the rata (lit. flat), as an obligation which requires that the same amount of contribution be made regardless of the ability of each household to pay, was unfair. He expressed this by saying 'I do not understand why the stage has to be built and the cost of it borne by all of us'.

While men work on the stage, women take turns to pound rice in a wooden mortar. They work from early in the morning until mid-afternoon, starting at around seven thirty in the morning and continuing until about three in the afternoon. During this time the village is filled with **tutunggulan**, the musical hollow thudding sound of the

wooden pestles produced by women hitting the side of the mortars rhythmically (figure 4.2), and of children playing and of people chatting and laughing. The women stop working only under orders of the Indung Beurang (midwife) of the Baris Kolot Indung, who takes on the responsibility for organising the cooking and distributing of food in the Bumi Ageung. Since very early in the morning people start to come to the Bumi Ageung to donate other raw ingredients for the feast, mostly coconuts, vegetables and spices. It is the responsibility of the Kemit to ensure that there is sufficient fuelwood available in the Pakemitan, a storage building of the Bumi Ageung, and it is he who has the right to decide which **kampung** has to supply it. On this occasion it was Kampung Cicemet who were providing.

Figure 4.2 The activity of rice pounding



A day before the **musawarah** (the consultative meeting), held on 19 July 1998, on the last Saturday of the **ponggokan**, mothers, some with young children, gather very early in the kitchen of the Bumi Ageung, to help prepare and cook for the feast. To

enable the women to do this many men take over the responsibility of childcare. In the afternoon, at about three o'clock, Sesepuh Kampung start to arrive. It is said, however, that only about one third of the total 556 Sesepuh Kampung arrived on this occasion. Some are very old, with only a few teeth, or are very deaf. Others, however, are as young as 25 years. There are those who arrive bare foot, others who wear simple plastic sandals, and others still who wear hiking shoes. Some of those who arrive prefer to speak Indonesian whilst others use Sundanese. There are Sesepuh Kampung who journey by foot through forest for up to six hours to get to Ciptarasa. For others, the journey is only fifteen minutes. Once in the Bumi Ageung, however, they all convey a traditional appearance. To enter the Bumi Ageung, particularly because it is the residence of the Sesepuh Girang, it is required that all Sesepuh Kampung wear batik headdress or a black hat. Men also wear a traditional Sundanese white or black cloth, while women wear a sarong. It is considered an honour when guests received a headdress and/or sarong directly from Abah or Emak (emak = mother); it is interpreted as a sign of recognition. To pass the time, men and women sit around in front of the open fireplace chatting, relaxing or watching television. All men smoke, and 'cik akh' (asking for free cigarettes) is common. Some, mostly elders, smoke kawung, home made cigarettes which consist of tobacco rolled in the leaf of the palm Arenga pinnata. Others smoke brand name cigarettes, of which 'Jarum Coklat', which costs 1700 rupiah per packet, is the most popular. On the face of it such things may seem superficial and trivial, but in fact they represent subtle markers of status, respect and appropriate conduct.

That night most men sleep wherever there is room in the front area of their houses, in their relatives' house, in the houses of other people, or in the Bumi Rakyat, whilst women sleep towards the back of these same places. In other words, men and women are separated. People who are considered to have a status i.e. **ménak** such as a Pak Lurah, Pak Bupati or other guests from the city, may have been given priority, and invited to sleep in the bedroom with the family. Others sleep in the living room, in the kitchen, even when this means sleeping in front of the door. Some use a pillow, blanket and mat, whilst others sleep with only a single cloth. Most of them, however, sleep without covers. The Bumi Rakyat is a mass of bodies. It is permissible to step over a sleeping person, even over a head (behaviour which is usually considered very impolite) as long as an appropriate apology is uttered. People, especially guests, do not need to worry about food. Besides contributions made by members of the community on the occasion of particular ceremonies, members make contributions throughout the year,

whenever they visit the Bumi Ageung. This ensures that there is always food available, theoretically for everybody, though some Kasepuhan are too éra, ashamed, to eat there. They are éra, either because of a feeling of low status, and having not given much of a contribution (i.e. because they are poor), or éra because of a feeling of high status (i.e. being rich enough) which indicates having enough food of their own. On this special occasion, however, one buffalo was slaughtered, even though most guests were themselves Kasepuhan. This marked the importance of the ceremony for the participants.

On this particular night, in Abah's consultation room, male petitioners take turns to ask for Abah's advice and for his blessings. The petitioners sit inside Abah's private house, in the front part of the guest room, which is divided by a one-meter high partition of plaited bamboo with a door leading to the consultation room. Here the petitioners sit on the floor on an amparan, a mat made of pandanus leaves. One by one, as the bamboo door opens, each petitioner ngagepor, crawls on his hands and knees slowly, towards Abah. One of the petitioners was Mang Dana, who on entering the room folds his hands and sembah greets Abah three times, bowing his head and stating his niat (intention) in a low tone of voice, almost whispering. Despite this clear attempt to indicate confidentiality and humility most of the conversation between Abah and his guests can be heard by others. On this occasion Mang Dana asks Abah's blessing for his seeds. Mang Dana opens his seed pouch made from white cotton fabric, and gives it to Abah. Abah brings the seeds near to his mouth and spits several times over them. Abah's saliva is considered matih (efficacious) by many Kasepuhan, even by non-Kasepuhan. Mang Dana takes the seeds back and again salutes Abah three times before crawling backwards to where he had originally been sitting, facing Abah continuously throughout these movements. As Mang Dana nears the door, he turns quickly and leaves the room. It is considered very impolite to present your back to a respected person. Thus Mang Dana did not turn until just before leaving the room. The queue of petitioners is regulated by an assistant who is appointed by Abah. This assistant, who by virtue of his power to control access to Abah, is considered to hold géngsi, a status, especially in the eyes of guests who are not willing to queue for long. He works the same hours as Abah, who receives petitioners and grants blessings until four in the morning.

The following day, at about nine o'clock in the morning, all Sesepuh Kampung gather in the living room of the Bumi Rakyat for the **musawarah**, an occasion which this time must reach mutually-agreed decisions prior to the formal meeting which is held

in public on the stage. The Sesepuh Kampung sits cross-legged, informally, with Abah, as the highest authority towards the front. Feet, the lowest part of the body, must always be hidden. Everybody sits on the amparan, except Abah, who sits on a cushion. Abah begins his speech by informing the Sesepuh Kampung about the Kasepuhan census data. This reckoning, based on the work of the Pamakayan of the Baris Kolot Indung, indicates that Kasepuhan consist of 786 households (Ind. Kepala Keluarga, KK) and 20,120 warga. In general, one house is counted as one household, regardless of the total number of family members or other persons residing in the house. Of 786 households, 3687 individuals are said to have other work besides being farmers. These other occupations include tourist guides, small traders and performers of traditional arts. The report indicates that Kasepuhan own 3,203 rice barns, 1,344 buffalos and 5,648 sheep. These data serve as a measure of what traditional Kasepuhan consider as wealth. Abah then sets out the guidelines for crop planting for each area, a directive channeled through the Urusan Jero of the Baris Kolot Indung. The decisions on this occasion were as follows:

That **ngaseuk** (planting in **huma**) be held by the Sesepuh Girang on 17 Jumadil ahir.

That **tebar** (planting sawah) to take place as follows, starting from higher to lower agricultural land:

Silvaria mila.	
Palambaran	20 Silih Mulud
Cipuntir, Cicemet	27 Silih Mulud
Situmurni	5 Jumadil Awal
Legok Tonggoh kadieu	19 Jumadil Awal
Cisarua, Cisuren	26 Jumadil Awal
Ciptarasa, Awigebang,	
Cipatat, <mark>P</mark> arakan Palay, Bojong	3 Jumadil Ahir
Cengkuk, Are-are	10 Jumadil Ahir

Abah also outlines the plans and dates for the **ngembang** (pilgrimage) schedule to take place the following week:

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Linggarjati, Pasir Jenjing - soré Jumaah (Friday afternoon)
Bojong, Tegal Umbu - Saptu (Saturday)
Lebak Binong, Lebak Larang, Pasir Talaga – Ahad (Sunday)
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The meeting lasts for less than one hour.

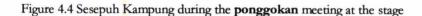
After the meeting, all Sesepuh Kampung move to the front yard of the Bumi Ageung, to gather on the stages, which are arranged in a triangular fashion, with Abah's stage in the centre front (figure 4.3).

Figure 4.3 **Ponggokan** stages. The stage in the middle ground, with six sides, for Abah. There is one other stage to the left, not shown in the picture. In the foreground is the entertainment stage.



This arrangement of stages is interpreted by some elders as a reflection of Abah's position as mediator between the Karuhun and the warga. At this meeting Abah uses a microphone to address what is a large audience of not only the Sesepuh Kampung but of the general public. He begins by saying how the contributions made thus far by members of the community were not yet sufficient to build the stage they were sitting on, a further 3,268,000 rupiah being required, and this was being donated by himself. Abah then moves on to a different subject altogether, strongly advising people not to relinquish their occupation as farmers, especially when tempted by gold mining as a quick and easy way to obtain money. It is more difficult, maintains Abah, to get rice than to get money. He pleas with them not to be seduced by money from gold mining. Although it was indeed possible to get money in only one day, to get rice you needed an entire year. Abah's rhetoric here needs to be understood in a context whereby some Kasepuhan have in recent years turned to gold mining as an alternative means of survival to rice farming. But at the same time Abah also mentions that some Kasepuhan have met with success in the city, for example as businessmen. None of the Sesepuh Kampung make any comment at this meeting (see figure 4.4). All of them sit in silence. Many smoke. A number of men said they felt sleepy, and a few actually fell asleep. The meeting was very much one-way communication from Abah to the Sesepuh Kampung and the members

of the public in attendance. The meeting lasted for about one hour. After that, one by one, the Sesepuh Kampung returned to their villages where they, in turn, informed other Kasepuhan about Abah's views and directives. By Sunday afternoon Ciptarasa is again quiet. The **ponggokan** meeting held on the stage had, in the view of some Sesepuh Kampung, a similar content to the previous **musawarah** held at the Bumi Ageung.





Many Kasepuhan people said that the 1998 harvest had not been as good as in previous years. There had been many **angin gedé** (strong winds), and the dry season had been long, causing the soil to crack and crumble. The harvest had been delayed until May. They should have harvested before May, had Batara Kala not sent various kinds of rice **hama** (pests) and **panyakit** (diseases).¹³

The next Friday, 24th July, several people returned to Ciptarasa to take part in **ngembang**¹⁴ an annual pilgrimage, the intent of which is a ritual to honour the deceased by placing flowers on their graves. The focus of the pilgrimage are the graves of former Sesepuh Girang, the predecessors of Abah Anom, and it is undertaken only by men. Women are involved in **ngembang** to the extent that it is they who prepare the food. Abah's wife, Emak explains that she has to stay in Ciptarasa to coordinate the women in

¹³ kungkang (Leptocorisa acuta), gaang (Grylottalpa africana), lembing, tuur parah

¹⁴ The word **ngembang** is derived from the word **kembang** (flower).

the making of the many preparations required for the **serah taun** ceremony. Because local women have to prepare food, they only congregate at one of the graves, that nearest to where they live, whilst men, as they are able to participate in the entire pilgrimage, visit many.

At about three in the afternoon, Abah and about 40 men begin the pilgrimage by descending the hill on which they live to visit the tomb of Abah Anom's father at Linggarjati. This was only about a ten minutes walk. Abah entered the building within which the grave was located, a single roomed structure with brick walls, door and window, and a roof made of sago thatch. Abah sat crossed legged at the foot of his father's tomb: it is considered impolite to sit on the head side. He made a respectful sembah (greeting) with his hands, as one would address a king, three times, and began to pray. Meanwhile, women prepared food outside the tomb building. Before eating Abah said grace. He thanked his predecessor (the former Sesepuh Girang), the Karuhun and lastly the batara-batari, asking each and all for blessings for the following year. This done the women then served food. Abah ate first followed by the other pilgrims. It is obligatory that visitors eat some food, even if this is only a small amount. It is believed that their predecessors consumed the essence of this food. As it is obligatory to eat at each tomb, it is considered wise not to eat much at the first tomb. One by one, the men follow Abah's steps to the tomb. This is thought to be an auspicious moment for a person to announce their niat, intention to do something, either verbally or in their heart, in the expectation that their future action will be recognised by the dead Sesepuh Girang. For example, one person announces his intention to try to plant a new rice landrace in the following year. By doing this the individual hopes that he will get a good crop. This, however, is considered as 'buying' a favour, and so the request, mésér, has to be paid for usually in the form of money, of around 1000 rupiah, cigarettes, betel pepper leaves, or menyan, an incense prepared from Aquilaria spp. After the intention has been announced at the tomb, a similar request is made to Abah. Once they have received blessings from both the deceased ancestors and the living Sesepuh Girang, their request is complete. People believe that this is also a good time to communicate with the ancestors in general. For example, at one of the tombs Ki Juhi offered his help to anyone who wished to communicate with the ancestors and was interested in knowing whether his wish would be realised or not. He held a wooden stick which he positioned horizontally along the length of both his right and left arms from one end to the other. Mang Tata then took his turn. He quietly muttered his wish. It was a good sign when the

wooden stick in Ki Juhi's arms apparently lengthened. Thus his wish would be realised. Two other persons followed Mang Tata. The outcomes of their divinations were not in favour.

The following day, at three in the morning, the pilgrims are ready to visit the tombs of the other Sesepuh Girang, as instructed by Abah, but on this particular occasion there was a delay. There were people who told me that it is usual for the time to melar. Such delay in timing described as melar, literally to lengthen (Ind. jam karet), is common and acceptable, especially with respect to Abah. Time is not exactly applied to Sesepuh Girang as he is driven not only by free will but also by a divine power. For example Karuhun may contact him at any time. It was about four in the morning before Abah finished receiving those members who had had no opportunity of visiting him during ponggokan, and by then he needed to sleep. Once asleep no one dared waken him, because they believed that perhaps he was receiving a message from the Karuhun. For the same reasons nobody else dared to go back to sleep. Abah would wake up and instruct the pilgrims to depart at any time. A number of persons, however, decided to leave, as Abah slept. They walked on and waited at the end of the asphalt road at Pangguyangan. At last, at about seven thirty in the morning, the main group departed. Abah rode on his motorcycle to the end of the asphalt road, where about 100 people were waiting. There were three jeeps, two small open Kijang trucks, one Elf minibus, and several motorcycles. The second tomb visited was that of Abah's grandfather. When Abah entered the tomb, the local Sesepuh Kampung and warga waited in a line, each taking turns to make their respectful greetings. This was accompanied by dogdoglojor music, sung and accompanied by a group of about eleven men.¹⁵

At each tomb it was common for the crowd to have waited several hours before the arrival of Abah's entourage. In spite of this uncertainty the women were able to prepare food and accommodation, at times having to wait until very late for the pilgrimage party to arrive. For example, at Lebak Binong whilst the entourage arrived the day after they had been expected, the women were still heard to say 'here we are, prepared at any time 'Don't worry about the food, there is a lot of rice'. At the road side on the way to the various tombs, especially where the road is unmetalled, and very muddy following heavy rain, many men were prepared to push or, where necessary, even carry the vehicles, as happened at Lebak Larang, the events of which I shall now recount.

¹⁵ This accompanying instrumentation comprises nine **angklung** and two **dogdoglojor**. The **angklung** is a traditional Sundanese musical instrument made of suspended bamboo tubes, which are shaken to produce a sound, whilst the **dogdoglojor** is a kind of drum.

On one side of a very slippery road there was a ravine, and on the other a steep wall. The Elf minibus was wobbling dangerously close to the edge of the ravine. Even so, very old people were among those who laughed. While the passengers were still seated, the car was lifted and carried by about eight people. With happy faces these men said 'why should we be afraid when there is somebody to **nangtayungan** (protect) us'. They believe that their Karuhun protect them as long as they have no bad intentions. We arrived back at Ciptarasa on Sunday night at about nine o'clock.

The **ngembang** is not considered complete until all tombs up to the seventh generation from Abah have been visited. The grave of the Ki Dja the second Sesepuh Girang in Cipatat is being visited only by a Kasepuhan representative. During a pilgrimage people are reminded that they must always be **éling** (aware); fully socially and cosmologically conscious. According to one saying:

'éling ka indung, ka asal, ka alam, ka gusti, jeung ka bakal'. 'be aware of our mother, our origin, our alam, our god, and our future before we start the new agricultural year'

4.2.2. Serah taun

The **serah taun** ceremony took place one week after the **ngembang** pilgrimage, falling in 1998 on the 2nd of August. **Serah** means literally 'give over' and **taun**, 'year'. This is an occasion for people to give thanks for any blessings they may have received over the past year. It is also a very 'public' ceremony. **Serah taun** is described as a celebration for everybody, including all **lelemes**, supernatural creatures, such as the 'ghostly forest people'. It is a time for 'nyoréang ka tukang, nyawang ka nu bakal kasorang', 'visiting the past and imagining what will be found in the future'. 1998, in fact, was the year of the 629th **serah taun** ceremony (figure 4.5). It is believed the first ceremony had been performed when Kasepuhan was ruled by a Sesepuh Girang whose grave is in Lebak Binong. His is the ninth generation ascending from the present Sesepuh Girang. ¹⁶

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¹⁶ These former Sesepuh Girang are, starting with the first: Ki Sar (Lebak Binong), Ki Dja (Cipatat), Ki Tja (Talaga), Ki Tji (Talaga), Ki Koy (Lebak Larang), Ki Dja (Tegal lumbu), Ki Djas (Langkop), Ki Rus (Bojong), Ki Ad (Cisarua). Cf. Adimihardja (1992), who provides different names while not being entirely clear whether they are pseudonyms or not.

Figure 4.5 The 629th serah taun banner



During the week preceding serah taun roads are checked, cleared of mud and, if necessary, metalled with stones. Tents and temporary bamboo buildings are constructed. Invitations are sent to the head of the police (Kapolres), the local head of the administrative district, Bupati, and the heads of the mining company operating in the Kasepuhan area, PT. Aneka Tambang. Announcements are made on the radio. Traditional puppets show and more modern modified stage performances arrive from Sukabumi, Cianjur, Subang, Bandung and also from nearby villages. In 1998 the TV stations Indosiar and SCTV also asked permission from Abah to record the ceremony. The Indung Beurang (midwife) in cooperation with a guardian of the loft, a house loft used as a storage space, estimated the amount of raw materials needed. Her duty, under the guidance of Emak, is to ensure that during the serah taun food is always available in the Bumi Ageung. Most of the ingredients had been contributed by Kasepuhan themselves, and included palm sugar, bananas, coconut, and vegetables. Emak coordinated the activity and generally guided the women in the work of pounding rice. As a large amount of rice is necessary, some was pounded in other villages. After pounding, the rice is stored in the padaringan of the Bumi Ageung. The women were also kept busy making different kinds of cakes and biscuits. However, the preparation of dodol dough from palm sugar requires great effort, and for this reason is considered to be the work of men. Every household prepares serah taun by repairing their houses,

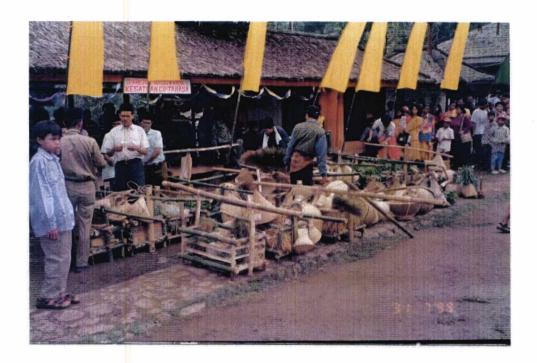
making new clothes and baking cakes and biscuits. The dodol, sagon, ladu and kiripik among others are popular.

On the afternoon of Friday 1 August a number of merchants not local to that area arrived and set up stalls along the side of the main road. They sold food, toys, clothes, and other household articles of a kind usually only available in towns. That night, at about nine o'clock, a number of different stage performances began. **Jipéng** was performed on the lowest level of the village, a little higher up **pongdut**, then at the highest level puppets show, and beside it **jaipongan**. Each orchestra played loudly, with the mix of different rhythms and sounds audible throughout the village. There were some complaints but these were not been taken seriously. Everyone enjoyed themselves.

The next day, Saturday, at about three o'clock in the morning, women began cooking in the Bumi Ageung. On this day the Bumi Rakyat must provide food for everybody. Three buffalos were slaughtered. Increasing numbers of merchants gathered along the main road. Several polres (regional police) officers guarded the event. 'Hansip'17, most of whom were kelurahan officials, worked busily issuing parking tickets for motorcycles. The exhibition hall was filled with local handicrafts priced according to a standard set by Emak (figure 4.6). For example, kanéron (bags made from woven rattan) were priced at between 4,000 and 15,000 rupiah each, and barn models at between 10,000 and 15,000 rupiah, depending on size and pattern. The intention of Emak in standardising these prices was to treat both the producer and the seller fairly. It is common among Kasepuhan for handicraft sellers to, individually, set very low prices, which fail to take into account the real cost of time and materials, especially when handicrafts are made from rattan which has been personally collected from local forests. While it is true that rattan is, in one sense, 'free', there is – quite apart from anything else - always a risk that a harvester will be caught by a TNGH officer. Some handicraft sellers' reason that what is important for them is the opportunity to obtain cash from an occasion which occurs only once a year. It is the opportunity to obtain cash which is, therefore, more important than selling at a profit, or at least at a price which reflects true costs. But, on the other hand, there are also handicraft sellers who take the opportunity of serah taun to sell their produce at inflated prices, taking advantage of increased demand. To pursue these ends such handicraft sellers prefer to sell their produce directly to guests.

¹⁷ Hansip is an Indonesian acronym for pertahanan sipil ('civil guard'). This kind of special constabulary was formed during the Sukarno era when there was a perceived need for a part-time civilian civil defence force, in addition to the military and police.

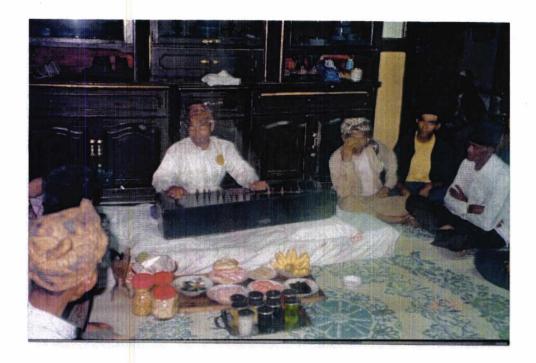
Figure 4.6 Preparation for Kasepuhan exhibition stall.



Whilst all of this is taking place, guests began to arrive. Three cars were parked at the **buruan** (yard) of the Bumi Ageung, one of which included a four hundred million rupiah Cherokee, a very expensive and exclusive car. Meanwhile Abah's ten million rupiah car was used to make several journeys to Pangguyangan to pick up guests, mostly government representatives. Overall, those visitors who arrived first received and used the best facilities, with the exception of **ménak**, noble guests. Those guests who arrived last were accommodated in neighbouring **kampung**.

At about nine o'clock in the evening the traditional entertainment performance begins, followed an hour later by a **pantun** at the Bumi Rakyat. The **mantun** is an activity of **medarkeun carita** (lit. **medarkeun** = opening up; **carita** = story) (figure 4.7).

Figure 4.7 Mantun activity



In accordance with this medarkeun carita framework, therefore, it is forbidden for Kasepuhan to recite a pantun which relates to the current lalakon of the Kasepuhan i.e. the ngahuma lalakon; for example, the Lutung Kasarung which describes a person who is working on huma. Kasepuhan believe that siloka, that is stories, situations, events and ideas described in the past, can be interpreted as if they apply to the present and future. future situations already somehow existing in the past, though are not clearly defined and are in need of more interpretation. To this end pantun help an audience place themselves into the lalakon by, as Kasepuhan put it 'ngeunteung ka diri sorangan, tong ngeunteung kana kaca', 'looking at yourself through the self, rather than looking at yourself through a mirror'. The pantun are only allowed to be performed at certain times, since they involve the 'opening up' of the lalakon of a person. To open the mantun ceremony Abah, accompanied by prayers, offers rujak (fruit salad) and various cakes and biscuits to the Karuhun. Afterwards the rujak and the cakes and biscuits are offered to the audience. On this particular occasion a storyteller started to tell the babad (story) of Ratu Pakuan Menak Barat Padjadjaran. In essence, this pantun recalls the ancient Sundanese Pajajaran Kingdom, the people of which Abah and other Kasepuhan believe they are descended from, and includes references to features of Kasepuhan life with which listeners will be familiar: for example, the bamboo fence around the residence of Sesepuh Girang. The audience, of mostly old people, listen to the story quietly and

attentively, but the general ambience is not one favoured by the storyteller, as he tells his story without a microphone and in competition with music from other entertainments outside the house, and delivered to an audience of mainly younger people. 'It's difficult to compete in loudness with the dangdut, isn't it? says the storyteller, in between the **pupuh**¹⁸, as he takes a short break for a drink to soothe his sore throat brought on by his having to sing so loud as to be heard above the competing music. Although the singer told the story with some jokes, and whilst cakes and biscuits were also made available, as the night progressed, most of the audience lay around the storyteller, some asleep, while the storyteller continued telling until he finished five pupuh and when the time was almost three in the morning. A jipéng, which was also performed by one of the Kasepuhan groups, finished at about the same time as the pantun even though there were no visible living humans around to listen and watch it. This does not matter since the performance is not only for mortals. Ancestors, supernatural beings and other creatures attend the serah taun. On this occasion the 'true humans', would mix with the 'ghostly forest people'. The 'ghostly forest people', however, have distinct features, so 'be aware if you see someone who constantly covers his/her face in between nose and mouth with the hands'. The 'ghostly forest people' do not have cowakan, a line at the centre which connects the nose and the lip.

Sunday morning is a time to entertain guests with ngaréngkong/ngangkut, a re-enactment of the carrying of the rice from the fields to the Ciptarasa, a journey of about one kilometer, and of the ngadiukkeun, the placing of indung paré (lit. mother rice), which was secured during the mipit (see p. 115), in the Si Jimat rice barn. On this occasion all Sesepuh Kampung wear white traditional cloth, some of which are provided free by the Kasepuhan authorities. Hansip and police clear the way for the procession in which rice is delivered to the rice barn (figure 4.8). Initial prayers are made as the rice arrives at the barn, accompanied by debus. Many guests, including non-Kasepuhan and people from the city, watch and capture the event in photographs and videos. The serah taun held on this occasion had been arranged for an external public audience. The 'real' serah taun occurred the following day, when Emak washed her hair and with some prepubertal girls washed and pounded the rice.

¹⁸ Pupuh determine the dangding melody of the poems (Wibisana 2000c: 562-574). There are 17 pupuh which are differentiated each according to pada, the number of rows in one stanza, padalisan, the number of syllables in one row, and the sound at the end of every row. Each pupuh has its own character. For example, Dangdanggula generates an atmosphere of happiness, and Asmarandana of love and affection. It is usual for one story to consist of several different pupuh.

¹⁹ **Debus** is a performance which stresses physical invulnerability. The state of trance is achieved through and derived from the Shi'ite practices (see e.g. Von Grunebaum 1970).

Figure 4.8 Sesepuh Kampung with uniform, ngarengkong, debus, and polisi



4.2.3 Ngaseuk

Early October is the time for **ngaseuk**, planting rice. Kasepuhan decide when to start planting on the basis of guidance from the Urusan Jero of the Baris Kolot Indung, who determines this in accordance with the movement of the **béntang** Kidang (the belt of Orion) and Kerti (the Pleiades) constellations. When 'Kerti mudun (goes down) and Kidang mencrang ditengaheun langit (culminates in the sky)' it is the time to plant the rice, the time when the soil is considered 'cold' and bringing good **perbawa** (characters) for the rice plant. The planting season must be initiated by Abah on his **adat huma** plot. The night before planting the 'Munding Jalingan' **pantun** is recited.

Early in the morning Abah, Emak, and the Pamakayan take rice seed to the huma plot, to the accompaniment of music played on a dogdoglojor, which is said to cheer-up the rice seed on its journey to its 'engagement'. Emak recites an incantation under her breath to wake up the rice. She is not permitted to talk, but sings quietly to calm the rice down, covers her hair and wears white cloth over her chest. Abah wears traditional cloth. When they arrive at the huma site Abah and Emak approach the pupuhunan (a ritual place within the swidden). Abah sits cross-legged facing the 'mother sea', and starts to pray. Emak sits beside Abah. Incense has been burned. The location and the orientation of the pupuhunan, as well as the time for planting, are determined according to Abah's

unique attributes, taking into consideration his rank, the year, month, day and time of his birth. In the background the dogdoglojor plays quietly, almost in a monotone. Abah spits panglay (Zingiber montanum) to the four corners of the pupuhunan to prevent evil spirits coming into it. He presses the palms of both his hands on the rice grains held in a bamboo container, boboko, until several stick on his palm. He then turns both his palms, from which his wife Emak selects two seeds, one each from left and right. The seeds selected should be beuneur, ngeusi (ripened and full), and located anywhere on the ngeusi full edge of the outstretched palm (figure 4.9). Two seeds represent salikur/sakuren, that is a pair of seeds which is considered as a couple (man and woman). Two seeds are 'married' by being planted in the centre of the pupuhunan as pancer. Thus, ngaseuk is a time for uniting rice seeds into a couple, and with the earth, in the continuous and cyclical sajarah of life. Some other young plants also planted in the pupuhunan at this time, including Daemonorops melanochaetes, Leea sambucina, Costus sp. and Erythrina sp. These plants are metaphorically the relatives of rice, and are also believed to derive from the body of Nyi Sri, the idea of these associations being that the rice will not be lonely and will be guarded by its 'relatives'. The rice is also accompanied by a mirror, hair comb, water, some perfumed oil and money, as it is reckoned Nyi Sri may need these things.

Figure 4.9 The positioning of the rice seeds on the palm of the hand for planting in the **pupuhunan**.



The four corners of the pupuhunan, the papadon, are planted with, usually, three, five or seven rice seeds, an example of the general principle whereby those things considered most important must be arranged gangsal (in an odd number). The gangsal arrangement represents the living human who dwells in the middle world on houses on stilts. The same cosmic tripartite division is reflected in the representation of human body parts into head, trunk and legs, and which is conceived as having five symbolic points: the upper being the head, the pancer (centre) being the trunk, the lower being the legs, the right being the right hand, and the left being the left hand. Thus Kasepuhan

divide the cosmos in terms of middle (or centre), upper (or above), lower (or below) and, right and left. A **jangkep** (even number) is used only to symbolise a dead human (or a non-human).

The concepts of pancer and papadon are an expression of the Kasepuhan view of the unity of the world. The rice seed unites through pairing (salikur/sakuren), and the pair then functions as a pancer to unite the four papadon. The pancer and the papadon need each other to exist: they are complementary and mutually necessary. This is also the way people see the relationship between luhur (upper) and handap (lower), between kiwa (right) and kénca (left), and between the cardinal directions kalér (north), kidul (south), kulon (west) and wétan (east).20 Polar extremes exist in relation to one another. For Kasepuhan, the pancer is the binding force of the four cardinal points, which Kasepuhan represent as papadon. In accordance with this view, an apparent dichotomy is presented between self and the other. This is, however, a relationship of balanced equivalents, 'hareup teuing bisi ti jongklok, tukang teuing bisi ti jengkang'. There is no superiority of one aspect over another, as each element is co-dependent. Such a symbolic scheme is related to, and is consistent with, patterns described for Javanese and Sundanese culture more generally, and exemplifies symbolic ideas found widely in Indonesian cosmologies. Similarly, in order for the alam to remain in a state of equilibrium, each component of this order has lawan, an opposite. For example, Laportea stimulans is in an oppositional, a lawan, relationship with Costus sp., whereby poison in the Laportea stimulans leaves is neutralised by the leaves of Costus sp. This kind of relationship is similar to that between stinging nettles (Urtica dioica) and leaves of the dock plant (Rumex obtusifolia) used in British folk medicine.²¹ In the Kasepuhan symbolic scheme of things humans are at the centre and are the key, but are at the same time part of an un-dissolvable unitary system. Humans are bound into a system consisting of other elements, which may influence and control their existence, whether they like it or not.

The bowl of rice seeds, which has been used for ritual in the **pupuhunan**, is brought and mixed with other bowl containing various seeds: rice, Coix lacryma-jobi, Zea mays, Sesamum orientale, Cucurbita moschata, Psophocarpus tetragonolobus, and Cajunus indicus.

²⁰ The use of body parts, numbers and centre-periphery oppositions to speak about the world is found elsewhere in Indonesia. Various articles compiled by de Josselin De Jong (ed. 1977) describe this, in particular see the articles written by Jansen ([1933]: 100-115) about Ambonese in Moluccas, and the context of Javanese monca-pat by Van Ossenbruggen ([1916]: 30-60). Also see Howe (1983) for the case of Bali.

²¹ This idea is mirrored in the modern concept of ecosystem stability: the homeostasis which is maintained through the function of complementary, compensation and competition between species (see e.g. Ernest and Brown 2001, Frost et al 1995).

Abah takes his aseuk (a sharpened wooden stick), plants the seeds followed by the members of the community who start planting Abah's swidden (figure 4.10). The accompanying cheerful dogdoglojor music marks a change from the earlier quiet music. Using an aseuk, men drill holes in the soil, followed by women who then place five or seven seeds from the mixture into these holes. Throughout their work is directed by the Pamakayan. The process of planting must start and finish at the pupuhunan. Puhu(n) means centre, centering the beginning and the ending of life, uniting the microcosm into the macrocosm, creating one single universe. There are no obvious rows or columns of holes, in contrast to, for example, the Baduy (Iskandar 1998). But the physical movements involved in planting must always be in the correctly divined direction, established on the basis of the unique personal attributes of the (usually) male household head, and the time of planting. To plant incorrectly is, as Kasepuhan say, ngahuap naga, 'in the direction of the dragon's mouth'²², implying that to plant in this way will only lead to the rice being eaten by the dragon. Not surprisingly, therefore, each household has its own planting direction.





²² This term relates to the elaborate calendrical system Kasepuhan use and which forms the basis for determining auspicious and inauspicious times and spaces for various activities. The dragon direction is based on calculating **dina naga**. Depending on the time of each day, month and year, the spirit of the **naga** (dragon) is supposed to change. **Dina** can simply be said to mean 'the time' (or the day), and is determined by calculating a combination of the **poé biasa** and **poé pasar** of a household (using either the male head or both the head and his wife).

Of about 1,000 m2 Abah's huma plot was completed in about ten minutes. It was then the time for members to plant their own plots in accordance with a pattern divined from the combination of attributes of either husband or wife, or a combination of the two. It is, however, most common to base the pattern on the attributes of the husband. Additionally, planting requires that both husband and wife be in an appropriate emotional condition. Ngaseuk is a crucial time in the calendar, a time when couples face many challenges. It is therefore necessary that they maintain a positive emotional state in order that the rice will grow and develop well. In the case of a widow or an unmarried person, since ngaseuk must be undertaken by a salikur/sakuren, a husband and wife pair, he or she will ask their relatives or neighbours to plant their huma plot on their behalf, or alternatively they may instead ngilu (accompany) others. Ngaseuk must be performed before people can plant their sawah. Planting sawah is less ritualised than planting huma, for example the sawah's pupuhunan is without a paparakoan (border). It is a case in point that the historical primacy of huma over sawah in Kasepuhan agricultural history is mirrored in the ritual primacy of huma over sawah at the present time, and as regards the order in which work is undertaken.

The Carita Parahyangan (written in the sixteenth centuries) states that '.... Sang Mangukuhan becomes pa(pang)huma (a farmer), Sang Karungkalah becomes panggérék (a hinderer), Sang Katungmaralah becomes panyadap (a tapper), and Sang Sandanggreba becomes padagang (a trader).' when describing the life of the Sundanese population (Atja & Danasasmita 1981). Danasasmita (1975) says that according to the Carita Parahyangan a farmer is called pahuma, pa being a verbal prefix, and huma referring to a dry rice field, but which also means imah (house). There is one mention of sawah but this refers to Ratu Dewata's grave 'sawah tampian dalem'. In the Sanghyang Siksa Kanda Ng Karesian (1440 Saka; 1518 Masehi) translated by Atja and Danasasmita (1981), there is one word pasawahan (panyawah), but there is no word for pacul (hoe), a necessary tool for working sawah. Words that are often mentioned include kujang (chopping knife), patik (adze), baliung (ax), koréd (small hoe with small handle) and sadap (tapping). Most of these are tools necessary for practicing huma and the last word, sadap, refers to the making of incisions in a palm tree to obtain sap. The Carita Parahyangan mentions '.... ikang hari Ratu Galuh mananem sarwijagih...' which means '.... Ratu Galuh planted various kinds of seeds (wheat)....'. Ki Umbara (1964) in his story of 'dongéng kajadiannana paré' (the origin of rice), part IV mentions '...., kaluar bibinihan ti kuburan Sri. Dibawa ka Prabu Siliwangi', 'various seeds come out from Sri's grave.

Bring them to Prabu Siliwangi', and, it was at this period, between 1482 and 1521, that Sri Baduga Maharaja, popularly known as Prabu Siliwangi, ruled the Galuh kingdom. It was also during his reign that the capital of Galuh moved from Kawali to Pakwan Padjadjaran (pakwan = palace), now known as Bogor. Though there is no conclusive agreement between historians as to which king is best described as Prabu Siliwangi, he is widely accepted as the king who made an order to start rice cultivation (cf. Adimihardja 1999: 223-224).

According to Ki Adria and Ki Karma, Kasepuhan have practiced huma for about 629 years, celebrated at the 1998 serah taun. The steps of the Si Jimat rice barn are believed to be more than six hundred years old. It is believed that the fall of Padjadjaran kingdom brought a major shift in their life: the adoption of an agricultural way of life. Before that, as we have noted, it is believed that Kasepuhan were soldiers who possessed élmu kawedukan (supernatural physical power) but who subsequently fled and adopted agricultural life. It is believed that the élmu kawedukan brought heat to the rice plants. Nowadays élmu kawedukan is not commonly possessed by Kasepuhan. The first report of sawah in Kasepuhan is for the period when the Kampung Gedé was located in Tegal Umbu, and is reckoned to have only been practiced in the area for around 90 years. However, there is no clear explanation of why 1998 should have been the 629th serah taun. An in-depth discussion of the historical details of rice adoption remains outside the scope of this present thesis, and I will now return to the discussion of huma practices.

About three and half months after planting, farmers cooperate in the building of a kind of 'supernatural fence' to prevent pests attacking the growing crop. This fence is erected through the magar pakaya ritual conducted at the Bumi Ageung. By offering fruit salad and cakes and biscuits, for example, Abah requests that Jodog (wild pigs) keep away from the rice so that they do not get killed by farmers protecting their crops. He also seeks reassurance from the spirits of the wild pig that if this happens they will not be angry, and will submit to people who chase them. The next morning, the male warga, commanded by the Tukang Tinggar (pest chaser) of the Baris Kolot Indung goes to the rice fields to chase the wild pigs away. Chasing and killing wild pigs in this context is, therefore, not interpreted as wanton aggression, since the intention has been clearly explained the night before to the wild pigs themselves and to their batara-batari guardians.

4.2.4 Mipit

Kasepuhan begin **ngabuat** (harvesting) in early March, signaled by performance of the **mipit** ceremony. This is the beginning of a busy time. In the afternoon of the day prior to **mipit**, Abah, Emak and the Pamakayan go to the swidden to **mabay**, that is, to put a mark on certain rice plants. They search for, and put a mark on five or seven panicles **nguren**. These are pairs of panicles of rice plants which move and bend in the same direction, in a way which makes them seem to 'hug' each other and which, preferably, originated from the same bundle of seed rice, and where the grains selected are **beuneur**, fully ripened and filled (figure 4.11). The reference to 'hugging' and the importance attached to panicles originating from the same bundle is an allusion to a human couple, **sauyunan**, walking in the same direction, and **sapamikiran**, having the same thoughts and ideas. At night the Juru Pantun recites the Gelap Nyawang Kidang Pananjung **pantun**.

Figure 4.11 Nguren panicles



Early in the morning of the following day, at about six o'clock, the mipit ceremony takes place. After praying, Abah and Emak cut the first rice panicles, which have been selected on the previous day through mabay. The first cut must be made in a particular way: facing the indung (the mother sea), taking a deep breath, holding the rice stalk, cutting the panicles, and only then releasing the breath. In doing so blessings are received from the 'mother', the sea. These rice panicles, usually those derived from five pairs, are for the indung paré, rice mother, and are wrapped in white linen. Abah and Emak then cut one handful of rice for nganyaran (anyar = new), for the first rice meal of the new harvest, and five more for binih (seed) (figure 4.12). When this has been completed the rest of the community harvest the remaining rice. Women and men cut the rice stalks using an étém (finger knife) in one hand, place the cut stalks in the palm of the other hand, and put the broken stalk into a small woven basket which is tied to their waist. They then lay the handfuls of stalks on the dykes surrounding the field, after which it is the job of men to arrange the stalks into bundles, pocong. Again, according to Kasepuhan, it is the pupuhunan which directs the movement of harvesting: what is to be done first and what last, and what is the correct way and what is the ngahuap naga.





The rice bundles are hung on bamboo racks which have *Metroxylon sagu* thatch roofs, **lantayan**, where they remain drying for about two months (figure 4.13). After the rice bundles have dried sufficiently men re-arrange the **pocong**, as the rice will have shrunk and lost weight while drying, and then transport the bundles to the rice barns (figure 4.14), where a ritual is performed for the **ngadiukkeun**, placing of, the mother rice. **Dodoglojor** moving around the village barns to accompany rice. Mang Kokon explained to me that the mother rice should remain in the barn, only the 'children' being taken out for eating or as seed, 'indung paré cicing di leuit, nu diliarkeun anak-anakna'. Mother rice is only used and eaten in an emergency, such as when supplies of other rice run out in an exceptionally dry year. This never happened while I was in the field, and if one household experienced a shortage of rice other **warga** would happily give rice to them rather than the mother rice be touched.

Figure 4.13 Lantayan

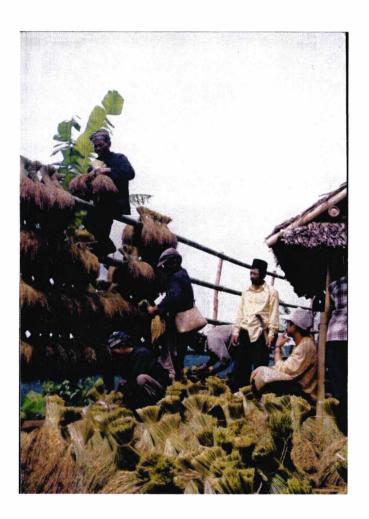
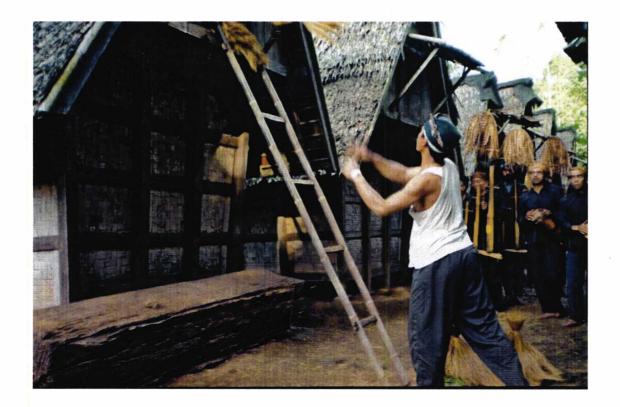


Figure 4.14 Depositing rice in a rice barn, accompanied by dogdoglojor



4.2.5 Nganyaran

About two months after the storage of the new harvest in the rice barn is the time for nganyaran, when the new rice is first tasted. Early in the morning women take the **nganyaran pocong**, the **pocong** which has been separated from others during the harvesting, to the lisung, the rice pounding mortar. The women who undertake the pounding on this occasion have to be 'clean', that is they must not be menstruating. If a woman is having her period at that time she can ask another women to pound rice on her behalf. In silence, and without any word, the women begin to pound. During the action of pounding women are able to distinguish the useful characteristics of different landraces, the relative ease with which the grains are released from the husk and whether the grains are hard or brittle. They also compare differences between landraces evident during the cooking process, which includes the seungit, aroma. Finally the women taste the rice, to see whether it is cepel (sticky), rangu (crispy), béar (loose), or ngeusi (full). During the entire process of preparing the rice women are expected to keep silent, as an act of tapa (an ascetic exercise), to fully appreciate the blessings of rice. Before the family starts to eat, the women break their tapa, describe to the husbands the rice from the new harvest, both in terms of its quantity and various qualities. Farmers agreed that the 1999

harvest was better than the previous year. The 1998 rice plants were considered strong but the grains were not full. Such grains require much effort to pound with relatively little return. The 1999 crop, by comparison, was considered an improvement, though because the rice did not ripen at the same speed, fields had to be harvested several times. Some of this information about the crop women will already have heard from their husbands, such as the total number of **pocong** harvested, but it is generally understood that men devolve to women overall responsibility for the management of harvested rice.

Between the harvest and the planting of the next rice crop there is a gap of about five months. The **alam** continues in its motion, cycling a different **usum** (era) and generating the various **perbawa** (characters) which inform agricultural decision-making. Along with the movement of the stars, of the Kidang from the Wetan (east) and the Kerti from the Kulon (west), these will determine the time of the next **usum tani**, or planting season.

4.3. Conclusion

This account of Kasepuhan cosmology and ritual has demonstrated the way in which human being is encapsulated within the alam, which has both spatial and temporal dimensions. The paths within the alam which give it predictability within a predestined cycle are the sajarah. The various parts of the alam are integrated through notions of mutual complementarily, with human beings taking a central (pancer) role. It is because of this that humans are the most vulnerable element, and why they need to be protected and controlled. The greatest risks, therefore, emanate from human beings.

Chapter Five

Negotiating an Understanding of the World

Inevitably, Kasepuhan are increasingly coming into contact with the outside world, in part through government programmes, particularly in the area of forest conservation, education and health. This contact is mediated by a process of cultural negotiation which leads to compromise in terms of acceptable practice, ideas and values, changes which influence how Kasepuhan now conceptualise the natural world.

5.1 Kasepuhan description of forest

People experience and understand the world through their historical participation in certain events and processes, in relation to how these events are talked about and how one event is related to another. In this sense, time is necessarily shared and inseparable from cultural values and social practices. How the perception and experience of time varies between cultures has been the subject of much anthropological discussion. Much of the ethnographic literature on time in southeast Asia (e.g. Condominas 1977, Geertz 1966, Hoskins 1993) focuses on its cultural relativity, although in a critique of Geertz's work on Bali, Bloch (1977) argues that humans distinguish symbolic time from a common pan-human experience of duration. Gell (1996), in contrast, suggests that the debates have been framed in the wrong way, and fail to make an important distinction between time and the processes that happen in time. For Kasepuhan, as we have seen in Chapter Four (figure 4.1), both past and future are epistemologically congruent and a single system of sajarah provides the terms in which forest can be defined and in which an order of conduct can be understood and practiced.

Forest in Kasepuhan thought is conceptually opposite to village.¹ The village is considered the habitat of humans. From time to time the village must be protected from the spirits and animals outside it – thus the village is a place of safety for humans. By contrast, forest represents a dangerous risk-prone area for Kasepuhan, a place which is associated with wilderness and which is the habitat of wild animals, trees and other mystical **lelemes**, invisible creatures and spirits, e.g. **jin** and **siluman**. The existence of these beings is evident through their sounds, which resemble those of a baby crying, or,

¹On how societies conceptualise space in terms of oppositions such as village:forest, culture:nature, agriculture:hunter-gatherering, and cultivated:wild see e.g. Goodale 1980, Karim 1981, Basso 1990, Janowski 1993, Garine 1993, and Ingold 2000: esp. chapter 10. For such symbolic oppositions in Indonesian cultures see e.g. Ellen 1996b, Schefold 1988, Valeri 1990.

when heard together, like the voices of some large group of beings, reminiscent of the tatabeuhan orchestra.²

Kasepuhan describe **lelemes** as being of many types and characters. They are as varied as human beings, with many parallels to human social norms but also displaying some inversion. Because **siluman**, which are often associated with evil spirits, like to sit on large huge trees the dark areas under these trees hence cause a feeling of **geueuman**, where the hair at the nape of the neck bristles. A pond with standing water is another example of the cause of **geueuman**. **Melenghir seungit**, a nice smell in the air, is a sign of the presence of good spirits. But contrast this with **nyambuang bacin**, the odour of a rotten corpse, which when smelled indicates that people must immediately be off.

On one occasion I made a journey to Cicemet. Accompanying me were Mang Kokon, Ki Karma, his wife, his eight year old son and his 15 month old daughter. We departed at about 11 o'clock in the morning. The journey obliged us to pass through the primary forest. There was, however, a pre-existing track. On the way Ki Karma showed me particular scratches on a stone which were, he explained, marks left by the action of a tiger sharpening its claws. Thus whilst he never personally encountered a tiger, Ki Karma believed that they existed.3 We also found a kind of larvae which Ki Karma and Mang Kokon said was a good cure for most mild illnesses e.g. external wounds and minor infections, but also useful in cases when someone lacks energy. The larvae would not appear unless they were intentionally given to us by their owner. Hence we took some. The sound of Kuraés (a small ant) was a signal that our journey would be safe from rain: there was therefore no need to rush. We rested several times. At nearly four o'clock in the afternoon, after three quarters of our journey had passed, we met, travelling in the opposite direction, a group of about five men, among others Ki Radi, the Juru Pantun. They said 'Excuse us for not having a long chat', and they walked off in a rush, almost running - being afraid that they would be overcome by darkness on their journey.

Maung (tiger) is an animal which has an important meaning for Kasepuhan. Rather than using the word **maung** for 'tiger' when in the forest, the term **ki** should be used instead, being an abbreviation of the word **aki**, which literally means 'grandfather' but which also refers to a person considered old, wise and deserving of respect.⁴ In general,

² The **tatabeuhan** orchestra is the Sundanese equivalent of the Javanese gamelan, comprising various percussion and string instruments, and commonly used to accompany wayang, or classical dance-drama (e.g. carita pantun) performances. For comparative studies of the importance of acoustical qualities in the cultural construction of the category 'forest 'see Gell (1995) on the Umeda, and Feld (1996) on the Kaluli, both people of Papua New Guinea.

³ The Javan tiger (*Panthera tigris sondaica*) is extinct and last seen in 1972 (Whitten et al 1996, Daryadi et al 1998, WCMC 2000), except, possibly, in the Taman National Meru Betiri, East Java.

⁴ Animal mockery is found generally in island Southeast Asia (see for example, Needham 1967, Evans 1970: 146-155, Forth 1989, Ellen 1996b). There are people in Northern Thailand who consider forest

Kasepuhan believe tigers to be the incarnation of those who fled to the mountains with Prabu Siliwangi, the last king of the Sundanese kingdom of Padjadjaran, when Pakuwan (the **kraton**, or palace compound) was taken by the Islamic kingdom of Banten in 1579. Prabu Siliwangi himself **ngahyang**⁵, 'ascended to the upper world', leaving behind his followers, who are ancestral kin to modern Kasepuhan, as tigers. Though there are some variations in the details, the belief in tigers as reincarnations of the Padjadjaran population is also found among other Sundanese groups (Wessing 1986, 1993). Besides the tiger's attributes of protecting, guiding and guarding people, they are also a source of danger. Wessing notes that pronouncing the word **maung** is thought to invite the tiger to visit. For the Kasepuhan, however, the danger of pronouncing the word **maung** is not because of the invitation thereof, but because you would not be respecting the ancestors by calling them by their birth name. Tiger's presence instead increases **tenang**, a feeling of composure, for Kasepuhan.

That night Mang Kokon and I went to Sesepuh Girang's residence to ask for his permission to enter the entrusted forest of Ciawitali. Along with his permission he gave us a bekel in the form of a pouch made of white linen cloth. We did not open the pouch. In the morning at about 06.00 o'clock we departed. This was my first experience of the forest, and what was more this was the Kasepuhan sacred forest. At the boundary between village and the forest Mang Kokon stopped walking. Unconsciously I continued to walk until I realised that I had already left him behind. He took a broad leaf, sat crossedlegged, and was quiet for several minutes. Unsure of what to do, I sat down on the ground, and waited. Then 'lets go' he said to me, and we continued our journey. We took a short cut. We secured water from a creek and drunk and collected whatever vegetables we found on the way. At about eleven o'clock we stopped and ate rice that we brought from home with vegetables we found on the way. Bamboo clumps marked our arrival at Ciawitali. But, again, without any warning, Mang Kokon suddenly sat and beckoned me to sit down as well. The sun was precisely at the position of midday, 12 o'clock. I was seated on his left. He stared excitedly at me. Then, with a serious face, his eyes (and head) moved from right to left as if there was something he watched that moved from that direction. 'Listen to that sound' he spoke softly, almost whispering. But what I could observe was only the movement of grass and ferns, and the sound of the wind passing through the bamboos. We sat still for several minutes and then on his instruction we continued our journey. He

animals as wise and cunning compared to village animals which are fools (Wijeyewardene 1968). Among the Malay the tiger is described as having a close relationship with man and is often regarded as dangerous but sacred (e.g. were-tiger) (see e.g. Skeat 1984 [1900]: 157-170, Endicott 1970: 21-23). Among the Baduy (Geiss 1952 cited in Iskandar 1998) the tiger is treated as an invisible ancestor to which offerings may be made to give protection to people. For other regional studies of tigers in Indonesia, see e.g. Watson (1993) and Bakels (1994, 2000) for Kerinci, Sumatra, and Wessing (1992, 1994) for Java and Madura.

⁵The belief that a legitimate ruler ascends to heaven or 'evaporates' into a spirit is common throughout the island of Java (Schrieke 1957: 271-283). Through ascension a ruler did not infringe the cosmic and moral order as he would undoubtedly do if he were killed or taken prisoner by an enemy or rebel.

almost ignored my many questions. But after walking a while we arrived back at the same place. Mang Kokon remained silent. So did I. Three times we arrived back in the same place as if we had walked in a circle. Approaching late afternoon we heard the sound of people pounding rice in a wooden mortar. It was a sign of village life. The sound directed us to the open area which then enabled us to go back to Ciptarasa safely. Arriving home, after a short rest, Mang Kokon explained that 'we have met Aki'. This was when we first arrived inside the entrusted forest, when we made our midday stop. He was convinced though that he could not clearly observe the tiger. He heard its call when Aki walked among the small trees under the bamboo. The surroundings were also very quiet: there was no sound of other animals (e.g. birds). He said 'it is difficult to explain. You have to feel it. You will learn all these signs through time when you become more familiar with the forest'. But he was reluctant to explain all of what was happening and with a little smile he said 'you will understand all later'. But we never discussed it again.

Forests are also means of protection. Kasepuhan exemplify this by describing how during the period of struggling for Indonesia independence the forest provided Kasepuhan people with shelter and an abundance of food.⁶

Thus, there is no single homogenous realm of safety in Kasepuhan thought. There are certain situations in the forest which are considered sangit, dangerous, but a sense of safety is also described for another reason. Whilst generally-speaking a village is considered as a safe place, people should also be aware of the presence of 'forest like' dangers. Thus, in the village the presence of a koréak barn owl (Tyto alba) is one that people should be aware of. When the kokoréakan, the sound of a koréak, is audible people are aware of the danger which may come. It is believed that when this kind of bird is present in the village they are a were-bird whose victims are babies or very young children, which they exchange for supernatural creatures in order to obtain, for example, instant riches. Therefore, if during the night parents hear the sound of this bird they turn their sleeping babies and young children so that they are talungkub, sleeping on their chest, in order to prevent them being eaten by this were-bird.

According to Kasepuhan forest is divided into three categories: leuweung geledegan, primary forest, leuweung titipan, entrusted forest and leuweung sempalan, open forest. These distinctions are discussed by Adimihardja (1992), but by the time of my fieldwork in 1998-1999, many people reported that open forest, which

⁶ The idea of forest as a dangerous place is common amongst other societies in Indonesia (see e.g. Houben 1994:337, Boomgaard 1995, and Whitten et al 1996). Forest is regarded as the habitat of many kinds of malevolent spirit and those people who align themselves beyond the pale of settled orders such as robbers, smugglers, bandits or criminals. But in spite of its reputation as a dangerous place, forest also provides shelter for potential refugees from established society whenever there are social and political tensions. It is also a place of escape from society for the purposes of individual ascetic meditation (tapa), as in a case of a

had once been primary forest, but on the instruction of Sesepuh Girang had been subsequently opened for agricultural fields, no longer existed. Kasepuhan attitudes and practices with respect to forest vary, depending on the category.

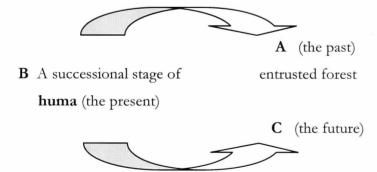
Kasepuhan customary law restricts the use of primary forest to extraction related to daily subsistence requirements, such as the gathering of vegetables, medicines and firewood. Entrusted forest, in contrast, is completely inaccessible, all of the time. Those persons wishing to visit entrusted forest must first obtain permission from Sesepuh Girang, without which it is thought they will suffer misfortune. There are four entrusted forests in the Mount Halimun area: Pancer Pangawinan, Rawayan, Citorek, and Buncangrek. The Pancer Pangawinan forest, as suggested by its name, belongs to the Kasepuhan, the descendents of Pancer Pangawinan of Padjadjaran kingdom. It is located inside the TNGH boundaries about four kilometres to the North-East of Ciptarasa. It also bears the popular name Ciawitali, on account of the fact that it consists almost entirely of bamboo awi tali (Gigantochloa apus), which, according to some Kasepuhan, extends to many hectares. According to Sesepuh Girang, Kasepuhan had opened the Halimun area in the early nineteen-hundreds, and Ciawitali was the first place in which Karuhun settled. A petrified staircase, monument and table and chairs, and a very old tree resembling a naked woman, are all seen as evidence for the past existence of their Karuhun. After the Karuhun abandoned Ciawitali it was left untouched until the present. Ciawitali, entrusted by the Karuhun to their descendents, is said to be guarded for future use, and so for the present it is forbidden to harvest this forest, although it only requires a wangsit (message) from the Karuhan sometime in the future to open this forest once again. According to Kasepuhan, primary forest is neutral within the framework of sajarah, but entrusted forest connects people through time, being both past and future. It is a mediator between people in the present, in the past, and in the future, providing a narrative dialogue to accompany the cyclical nature of time.

These examples of links between tigers, entrusted forest and the ancestors stress the importance Kasepuhan place on relations with the forest, and in particular the importance of the relations of wana, wani and ngawuh. Though what is understood by the terms wana, wani and ngawuh is that people should feel welcome, have a sense of companionship, and be knowledgeable in their relations with the forest, in practice most Kasepuhan still fear entering or passing through the forest, especially when alone and at night. Both the forest and the night constitute spaces – the one geographic the other

temporal - in which the probability of **teu nyana teu kaduga**, un-expected and uncontrollable events, is increased. In this case Sesepuh Girang is in exception 'mung Abah nu tiasa', 'it is Abah who can/is brave enough to do that'. He commonly, not to say everytime, departs for another **kampung** in the middle of the night. In effect, by contrasting himself with commoners' general feelings about the forest, he attracts to himself the status of **sakti** (supernatural power), and is seen as having exceptional relations of **wana**, **wani** and **ngawuh** with the forest and its inhabitants.

According to Kasepuhan descriptions, once forest is opened it can only return to forest again through the successional stages of huma, the primary reason for opening an area of forest in the first place. Post-swidden re-growth forest is described as jami, reuma or talun, depending on the kinds of plants found there. The first successional stage after huma is jami. Jami is land on which rice stubble is still to be found, corresponding to a period of less than a year after the rice harvest. After about one year, abandoned huma develops into reuma, weedy and shrubby underbrush. An alternative route of succession is talun which develops through human intervention, by purposefully planting useful plants, for example, fruit trees, and trees which provide construction timber and firewood. Each of these successional stages through which opened forest passes - huma, jami, reuma or talun - in relation to the concept of sajarah, is said by the Kasepuhan to be part of 'the present' or 'now' (figure 5.1).

Figure 5.1



- A Entrusted forest as abandoned **huma** represents life in the past.
- B The various successional stages of huma represent life in the present.
- C Entrusted forest, as potential huma, represents life in the future.

(1993).

The model illustrated in figure 5.1 shows how practicing **huma** and observing the changes in vegetation enable Kasepuhan to both configure time and define the status of the forest. By practicing **huma** Kasepuhan maintain a relationship with forests over time through a cycle of use, re-generation and re-use. By practicing **huma** and using different re-growth forests, Kasepuhan maintain intimate contact through which the relations of **wana**, **wani** and **ngawuh** are established. Forest, in this sense, constitutes an integral part of the Kasepuhan ideological, social, economic world, and facilitates the exchange of material and information.⁷

5.2 Official perceptions and representations of forest and land

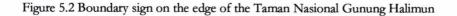
Since 1924 Halimun forest has been protected (Ind. hutan lindung), and in 1972 it became a nature reserve (Ind. cagar alam) was managed by Balai KSDA Jawa Barat. In 1992 this forest was officially designated as the Mount Halimun National Park (TNGH) through the Ministry Decree of Forestry No. 282/Kpts-II/1992 (indicated by the existence of the posts at each entrance, see figure 5.2), since then the management and responsibility of the park has been with the Gede Pangrango National Park Headquarters in Cipanas - Cianjur, West Java.

The park covers an area of \pm 40,000 hectares, the largest natural forest in the region. The altitudinal variation of the park is between 570 and 1,929 m. Combining this with the lowland forest of the Ujung Kulon National Park (which forms the westernmost part of the island of Java (0 - 620 m in altitude), and the montane sub-alpine forest in Gunung Gede Pangrango National Park (1,000 – 3,019 m in altitude), it has created the most extensive chain of typical altitudinal variation of tropical forest area remaining on the island of Java (PHPA 1997).

The TNGH lies between longitudes 106° 21′ - 106° 38′ East and latitudes 6° 37′ - 6° 51′ South. It is an important area for hydrological reasons, with no fewer than eleven rivers flowing through it (six to the Java Sea and five to the Indian Ocean), to the more populous areas, including the areas of Jakarta and Tangerang. The mountain peaks within the boundaries of the park include Halimun (1,929 m), Sanggabuana (1,919 m), Kendeng (1,867 m), Botol (1,785 m), South Kendeng (1,764 m), South Halimun (1,744 m) and Amdan (1,463 m). Mount Halimun and the neighbouring peaks represent a continuation

⁷ For a comparative example of forest used simultaneously as a source of subsistence and of cultural orientation see e.g. Fairhead and Leach 1998.

of the volcanic Bukit Barisan formation of South and West Sumatra. The area consists largely of breccia, andesitic and basalt lavas on top of which are soils with the characteristics of Andosol in the centre whilst in most other places there are Latosol type soils. There are also a few areas of sedimentary rock formation.





Most biological and physical features of the TNGH described here are reported in various sections of the 1998 Report on the Research and Conservation of Biodiversity in Indonesia Volumes III and IV, edited by Horiuchi et al and Simbolon et al. This is an account of joint research conducted by the Indonesian Institute for Science (LIPI), the Forest Protection and Nature Conservation Bureau (PHPA) and the Japan International

Cooperation Agency (JICA). I have relied on this Report for the existing plants and animals; local names given by particular Kasepuhan individuals during field journeys are compared to the work of Heyne (1950), Hoogerwerf (1949a,b, 1970), the Direktorat Bina Kawasan Pelestarian Alam (1994), and Plant Resources of South-East Asia (PROSEA). to identify scientific to local names (provided in Glossary 1). It should be noted, however, that this is neither an ecological nor an ethnobotanical study of biodiversity, but rather these data are included to give some indication of the significance of the features of Kasepuhan shared environment in relation to their perceptions of nature and environmental risk.

The Report proposed that TNGH forest structure and floristic composition are related to local conditions rather than to altitude generally. However, three altitudinal zones have been established which are based on the diversity of its plants: a lowland forest colline zone at an altitude lower than 900 m (sometimes up to 1,150), a submontane zone at 1,050 – 1,400 m and a montane zone at 1,500 – 1,800 m. Over half of the forest is described as sub-montane vegetation. Altingia excelsa can be found easily in the colline zone; Schima wallichii, Eurya acuminata, and Dipterocarpus hasseltii are in the submontane; Quercus costata, Dacrycarpus imbricatus, Podocarpus blumei and Eugenia corymbifera are in the montane. There are several patches of bamboo forest in TNGH but they also grow abundantly in many hilly and valley areas.

Halimun's forests are an important habitat for Java's three endangered endemic primates: Hylobates moloch, Presbytes comata, and Trachypithecus auratus. The Panthera pardus and the endangered Spizaetus bartelsi are also found here. Whitten et al (1996) noted that in 1972 there was a report of the existence of tigers. The park is home to at least nine of Java's 25 endemic birds, such as the rare and protected Otus lempiji. You may also see Sus scrofa, Muntiacus muntjak, Cuon alpinus, Felis bengalensis and Galis galis.

The park is intended to protect natural, water and tourism resources as a model for *in-situ* conservation, research activities, and eco-tourism. The superimposed areas of the vegetation map, the animal sensitivity map, the altitude classification map and the slope classification map inscribe concentric circles, indicating three zones i.e. a core (Ind. hutan.inti), a wilderness (Ind. hutan.intensit) and intensive use (Ind. hutan.intensit) zones. The core area has been given the priority for conservation, strictly protected, situated at the centre and at the high altitudes of the park, and at the south east part where there are high density primates habitats. The wilderness zone permits limited utilisation, such as for research, eco-tourism and education activities. The intensive use area contains

resources which are permitted to be used by local people for subsistence. It is situated at the border area of the park and is considered a buffer zone. Forest surrounding the park, at about 82 hectares, is designated as production forest, and is managed by Perusahaan Umum Kehutanan Negara, PERHUTANI, a state owned company.⁸

5.3 Conflicting interpretations and the negotiation of risk

In accordance with the Statute No. 5/1990, the three main activities in the management of a national park are protection, preservation and extraction. But one officer of the TNGH mentioned that during period 1984-1994 the Mount Halimun forest cover had decreased approximately by 2%. In the past the large timber Dipterocarpaceae tree species were common in the lowland forests at an elevation of 600-700 m. The large timber trees continue to be the main target for illegal felling which is now frequently observed for *Altingia excelsa* and *Schima wallichii*. *Toona sinensis* (Meliaceae) was also common but is now very rare (see also Whitten et al. 1996). Rattans such as *Calamus viminalis*, *Daemonorops sp.* and *Korthalsia laciniosa* are subject to local extraction, and are used for domestic necessities, while the bamboos *Dendrocalamus asper*, *Gigantochloa apus* and *Gigantochloa pseudo-arundinacea*, and *Gigantochloa atroviolacea* are used for building constructions and musical instruments e.g. **angklung** and **calung**. The effect of disturbances are most visible in the western part of the park (see figure 5.5).

In 1995 the Halimun areas had a total human population of 160,000 with an annual growth of 2.29%. Administratively it was part of three kabupaten, 13 kecamatan and 46-52 desa (Susmianto 1999). There were approximately 2000 ha enclaved including 971.22 ha of the Nirmala tea plantation. The illegal encroachment was about 230 ha. Official TNGH documents recognise local people as part of the Halimun forest ecosystem. 'Local' has been defined by TNGH as people who are living adjacent to the park, living within enclaves, living within illegal encroachments (but admitting an ancestral connection with the area), and living within the Nirmala tea plantation. But, in spite of recognising the role of local management, TNGH officers do not believe that the perceptions local people have of TNGH forest match in quality the official vision and objectives of TNGH management (Susmianto 1999), and, of course, from the state's

⁸ Perusahaan Umum Kehutanan Negara (PERHUTANI), which was originally established through the government regulation PP No. 15/1972, has changed its status several times before being recently reestablished as Perusahaan Persero (Persero), following the PP No 53/1999. This was part of a government programme of privatization.

⁹ In **calung** several different lengths of bamboo internode are placed in sequence, raised on a wooden board, and then hit with a stick to create a distinctive note.

point of view they are correct to recognise this. The management of TNGH has, for example, blamed local people for frequently losing, damaging or removing official boundary posts.

Due to its geological condition, the Mount Halimun area contains extractable gold and silver ores, and TNGH management, therefore, sees as a threat the extended gold mining activities of PT Aneka Tambang (PT. ANTAM), the only mining activity permitted by the government. From the legislative point of view, the TNGH and the PT. ANTAM are both legitimated through the Undang Undang (statutes): the TNGH is supported by the Basic Provision of Forestry decree No.5/1967 and the Conservation of Natural Resources and its Ecosystem statute No.5/1990, and the PT. ANTAM by the Basic Provision of Mining statute No. 11/1967. PT. ANTAM has been present in the area since 1936. The first operation was in Cikotok, from 1936 until 1991, while their current operations are in Cikidang and Pongkor. The TNGH have also sought to combat illegal gold mining by local people, officially named PETI (Ind. Penambangan Emas Tanpa Ijin). There are at least six identified locations with gold mining potential in the area. It is true that many local people become illegal miners but the opening of the forest by the state owned company PT. ANTAM also attracted many illegal newcomers, encouraged by the emergence of transportation and communication facilities. Data for 1998 show that the activities of PETI in the Halimun area had reached 53 Ha (Susmianto 1999). These developments have consequences in terms of current environmental risk assessment and are an issue to which I will return in chapter seven.

Faced with such problems, therefore, TNGH management have tended to concentrate their activities much more on protection and security rather than attempting to balance protection, preservation and utilisation (Susmianto, undated). Whatever the law might be in this area, some TNGH officers claim that it is the intention of TNGH to allow only use of the forest for research and eco-tourism, and to prohibit local people from using forest resources without prior permission, punishing any infringement of the rules. This means that, in practice, any rights local people have over the forest are denied. Indeed, although the concept of an intensive-traditional use zone has been accepted, so far it has not been defined and mapped.

According to one of the TNGH officers, the most frequent violation is wood theft which is only outmatched by the theft of rattan. It is important to note the terminology used here: 'theft' rather than 'extraction' or 'taking'. Theft, of course, is a punishable act. Continuously being chased, caught and punished, and running the risk of

being classified as thieves by TNGH, effectively led Kasepuhan to regard TNGH forest as forbidden forest. However, to some extent, people's perceptions of the prohibition of TNGH forest differ from that of entrusted forest. This can be examined in terms of how much people are afraid of particular forests and associated sanctions. Thus, while Kasepuhan are prepared to take a risk by taking wood from TNGH forest, no attempt is made to enter entrusted forest without first obtaining permission from Sesepuh Girang. Government rules and sanctions are seen as negotiable and predictable in that they can be managed directly, and are not an insuperable obstacle as long as there is money, goods or animals to offer officials. By contrast, prohibitions and sanctions which emanate from unseen supernatural powers are rarely negotiable and are often unpredictable. Indeed, it has been demonstrated quite extensively that people perceive a negative, but predictable, outcome, as being less risky than an unpredictable one (e.g. Royal Society Report 1992). Further, Bryd et al (1996), based on their study on three communities in El Paso (USA), show that perceived risk to self or family alone is lower than perceived risk to the community as a whole. This is also true for Kasepuhan, in that sanctions recommended by TNGH officers are applied to particular individuals and families, whereas supernatural sanctions more often affect the whole community. Within the framework of supernatural sanctions a community will strongly monitor its members behaviour while violation of human-imposed sanctions (e.g. by TNGH) are more loosely enforced at the community level.

In trying to effectively manage their now limited access to the local material world, Sesepuh Girang encourages his people not to disturb the government land whenever officials are around, by adopting an ucing-ucingan (hide and seek) strategy. In his view, Kasepuhan have the rights over resources which are on their pangkuan, 'lap'. Moreover, he argues, local people do not destroy the forest on such a large scale as government activities e.g. mining. Nowadays, due to mining activities carried out by the government, Kasepuhan no longer hear the tatabeuhan sound accompanying puppets performance from Mount Peti in Cikidang, which at certain times, is believed to be played by their ancestors. Mount Peti is so-named because of belief that a peti (or a kind of box)¹⁰ once existed on this mountain. Therefore, when there are no government officials, Sesepuh Girang is more equivocal in passing on government instructions. His attitude is: 'tong mata buncelik, it is all right as long as it doesn't happen in front of either TNGH or PERHUTANI officials'. The TNGH itself has insufficient personnel to guard

the entire forest, about 80 persons for 40,000 ha, whilst PERHUTANI is also short of manpower. Thus, with TNGH and PERHUTANI shortages of manpower on the one hand, and the need of the local people for local resources on the other, a compromise between Kasepuhan and low-level government officials is reached. The forest guards (Ind. jagawana), and plantation officer, allow local people to take firewood as long as this wood is taken from fallen trees. Often, however, rather than wait for trees to fall down local people will sometimes assist the process by (illegally) felling trees themselves, leaving them for a while, and then cutting them up for firewood. Of Course at the end it is forest which suffered from this kind of negotiation.

In accordance what is officially understood as 'local', it is only people living outside the park, outside the production forest, and living within the enclave who are recognised as having land rights. Only a small amount of land and village houses are certificated as Hak Milik (freehold). The rest remain Hak Guna Usaha (rights to use), originated from tanah girik, which is subject to local government tax (Ind. Iuran Pembangunan Daerah, IPEDA). The Kasepuhan term tanah balangkoan (land with paper) refers to these certificates. Historically, according to some Kasepuhan since the early 1900s, their ancestors owned what local people called the Cap Singa certificate, a certificate which bore the lion logo of the Netherlands East Indies government. In the 1960s, in accordance with Indonesian land reforms, the Cap Singa Certificate was superseded and made invalid. Subsequently, the government started to replace the Cap Singa certificate with a new one. But, evidently what they have now is only a right to cultivate, not to own. This certificate can be traded. The value of a certificate depends on the location, topography and water supply of the land in question. For example, in 1999, 350 square meters of fairly well located dry land could be sold for about 400,000 rupiah. Irrigated land is more expensive than dry land. The alternative is to obtain a 'right to cultivate' certificate, which can be negotiated directly with a PERHUTANI officer in the field. People first take the risky action of opening-up PERHUTANI fallow land. If they are caught by officers they then initiate negotiations. One informant said that he had to offer three chickens to the PERHUTANI officer as payment. His land was cheap because it was un-irrigated and because it was located on a steep slope. Both land with paper and land acquired through negotiation are taxed differently, but again to negotiated levels. In 1998 the agreed tax was 10 percent of the yield, but in 1999 this tax had risen to 15 percent and was often supplemented by various goods demanded by PERHUTANI

¹⁰ Peti, lit. meaning trunk or box, refers here to a wooden box which is used to store a set of tatabeuhan

officers. This 'negotiation and cooperation' in relation to payment' between PERHUTANI and locals has been regarded by TNGH representatives as the source of the low esteem in which locals are often held by officers, which leads to further failure in implementing state regulations. According to TNGH, their jagawana are more strict (i.e. not corrupt) in enforcing the state regulations.

The economic crisis (Ind. krisis moneter, krismon), which hit the country in the mid-nineties began with the depreciation of the rupiah in September 1997. Figures 5.3 and 5.4 show the rate of inflation and how this is impacting differentially on rural and urban peoples.

Figure 5.3 Inflation rate (Source: Biro Pusat Statistik, Central Bureau of Statistics).

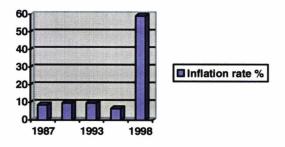
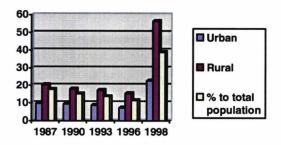


Figure 5.4 Population below the poverty line (Source: Biro Pusat Statistik, Central Bureau of Statistics)



In the urban areas many people were pushed out from waged worker by many formal sector employers.¹¹ The <u>krismon</u> later collapsed into further political chaos, and after three decades in power the Suharto New Order regime finally fell in May 1998. Social unrest erupted in several places, for example in the capital city of Jakarta, and religious and ethnic violence broke out in other Indonesian islands, such as the Moluccas, Sulawesi and Kalimantan. Transmigrants (and other migrants) had to flee from areas in

and wayang puppets.

¹¹ See e.g. Ahmed and Dhanani (1999) for detailed employment figures at the time of the crisis.

which they had settled in recent decades. Many people were forced to return to their place of origin, where they were born and where both parents were living, mostly in the rural areas. Thus, by the time of my fieldwork there were increasing numbers of people living in the rural areas of West Java, including areas populated by Kasepuhan. People reason that life in the rural areas was generally easier and safer, as here they would receive support from their families, and the cost of living was cheaper than in urban environments. These population movements, however, put pressure on local resources. Social control was weakened by political instability and uncertainty, and police were often ineffective. Indeed, it was widely known, and could be easily observed, that some police officers were themselves involved in illegal activity. Evidence of such arrangements were evident at illegal gold mining sites, such as in Pongkor and Cikidang. These issues came to light after a landslide which resulted in many deaths.

Seeing the inability of the government to maintain social control following the economic crisis encouraged Kasepuhan and non-Kasepuhan alike to expand their cultivation areas to include the surrounding forests, where enough labour and other resources was available. In 1999 Kasepuhan began to notice that their entrusted forest had been encroached upon by non-Kasepuhan. Kasepuhan reported infringements to the local police, though more often than not no action was taken. The conflict continued until at least the later part of the year. Some Kasepuhan showed considerable commitment to protecting their entrusted forest, including mass mobilisation to chase away intruders.

It is not surprising that non-Kasepuhan are also involved in various land rights issues. As mentioned in Chapter Three, Kasepuhan claim that they are the descendants of Padjadjaran troops who fled and stayed in the Banten area after refusing to co-operate with the Islamic Banten kingdom. There are Kasepuhan who describe their present position in terms of historical prophecies as to where they will eventually settle. Following wangsit, supernatural message, which are believed to come from the Karuhun, the Kampung Gedé is periodically moved. There are certain situations which are interpreted as a sign in this respect. Thus, during the time of my research in 1998-1999, the Kasepuhan Kampung Gedé at Ciptarasa was regarded too ramé, as having become 'too busy, with too many people coming and going'. Sesepuh Girang and the Baris Kolot Indung predicted that in the near future they might have to move again. But it is only the Sesepuh Girang and his seven assistants in the Baris Kolot Indung who

¹² See e.g. Breman and Wiradi (2002) for a particular case study of socio-economic dynamics during the

obligatorily have to move to create a new central village. Other members of the community can decide for themselves whether they want to leave or stay. The Sesepuh Girang however is never completely disconnected from the former Kampung Gedé. During the **ngembang**, the pilgrimage ritual, he and his party visit these villages, see their family and land, whilst continuously orientating themselves through 'éling, to origin, to mother, and to alam, to God and the future', éling ka asal, ka indung, ka alam, ka Gusti, ka bakal'. For Kasepuhan this is a matter of following their ancestors teachings and the myth of their origin, which has the advantageous effect of helping Kasepuhan maintain their holdings as through their resistance to outside influences they expand their claim over new land, whilst at the same time, through the myth of their origin, they maintain their former lands. The non-Kasepuhan consider this progressive movement of the Kasepuhan Kampung Gedé as annoying. Therefore, while the Kasepuhan regard the non-Kasepuhan as intruders into their forest, the non-Kasepuhan, as mentioned by one of the Pangguyangan residents, consider Kasepuhan in the same way. Kasepuhan limit non-Kasepuhan access to land through continuous expansion.

Kasepuhan see a connection between the ways in which outsiders behave with respect to the local environment, particularly the way they deport their bodies, and with respect to the ideas they seek to disseminate. Thus, in the opinion of most Kasepuhan, urang dayeuh, 'city people', for example the ahli, 'the teachers of environment' (Ind. akhli lingkungan), differ from themselves in being far removed from the alam. Most ahli are afraid and are wary of touching wild plants and animals living in the forest. A number of teachers not wanting to get wet or dirty, stick to the footpaths. For example, Japanese researchers working for IICA always use a jeep unless the weather does not permit this. Bulé visitors (white people) are different yet again. They are not afraid of the night, even when they have to pass through the forest; indeed some prefer to walk at night – finding it refreshingly cool – and are not afraid of **jurig**, mischievous supernatural creatures. For local people, walking through the forest at night time is regarded as amit-amit, to be avoided with the greatest effort. However, bulé seem very afraid, instead, of the many diseases to which they might succumb; always bringing their own water (e.g. 'Aqua') and refusing to drink from the available natural water sources e.g. from the river. They also bring wrapped foods (e.g. bread and cheese) complete with the necessary tools with which to eat it (e.g. plate, cup) and refuse to use plant leaves instead. They also bring special towels. The Indonesian 'assistants' who accompany researcher visiting from the

city are thought to be not so very different from their Western bosses, both are considered smart and clean.

On the occasion of the Sarasehan Pelestarian Lingkungan Hidup (Seminar on Environmental Conservation), which was held in Ciptarasa in 1999, guests asked that they be transported by Abah's car. If this was unavailable then they preferred to take an ojég (i.e. sitting at the back of a rented motorcycle, a kind of motorcycle taxi) rather than to walk. During the Sarasehan the 'city people' distributed one hundred sets of promotional material to the local people, each consisting of a certificate, office bag, booklet, brochure and ballpoint pen. Particular Kasepuhan persons, local state representatives, at the level of desa, kelurahan and kecamatan, and even some NGO representatives, appreciated these gifts, especially the certificate and the bag, for the status they conveyed. Thus, holding the bag labelled 'Sarasehan Pelestarian Lingkungan Hidup' was subsequently used as evidence of having attended the Sarasehan, and therefore to some extent of 'owning' knowledge of conservation. Moreover, together with the certificate, they demonstrate the recipients as conservationists. For the majority of local Kasepuhan these objects have no connection with alam and have no use. Thus, paradoxically, local Kasepuhan who conceive of their environmental relations through intimate contact with the earth are completely alienated by a set of symbols which outside agencies employ to encourage conservation-mindedness, whereas those outsiders who identify themselves with the globalised administrative and bureaucratic trappings of conservation, like the materials they give away, do so only in an abstract, reified way, at a distance and without intimacy.

Indeed, it is outsider insistence on bodily separation that subtly influences the way local people interpret 'pelestarian' (conservation) to mean 'do not touch', which is consistent with the existence of the park and parallel to its borders. The word lastari, according to Kasepuhan, refers to a grave, an everlasting and unchanging condition. The activities of the pelestarian lingkungan therefore was likened by some of the warga to the creation of a museum, effectively stopping life and the flow of the alam. The concept of a 'museum' itself had been acquired through schooling, and by some through direct experience when visiting the city of Bandung. This interpretation of the meaning of lastari, compounded the confusing definition of pelestarian lingkungan delivered by outside agencies. For example, in the intentions of the TNGH there is a discrepancy between what is explained by TNGH officers orally (and theoretically) and what is being

practiced in the field. Kasepuhan question whether nature conservation activity represents a risk worth taking.

However, viewed from another perspective, we should note that Kasepuhan Ciawitali Entrusted Forest is similar to the TNGH. By setting forest aside for future use it conforms with the definition of sustainable development, where the rate of use is within the limits set to ensure 'both current and future potential to meet human needs and aspirations' as set forth in the Brundtland Report of Our Common Future (World Commission on Environment and Development 1987:46). Kasepuhan do not overuse forest resources to satisfy present needs, and this is consistent with their concept of the cyclical nature of time. Kasepuhan are predisposed to look into the future to consider the needs of future generations as being equivalent to present needs. Viewed from this angle, therefore, there is no conflicting perception of risk at the conceptual level but, though the definition of 'saving' may vary according to each party, as might how the interests should be negotiated, resolved and implied at the practical level. In spite of a lot of rhetoric concerning 'sustainable development', it is evident that in many places 'modern' populations maximise their present needs without, or with little, regard to the needs of future generations (e.g. granting logging concession).

There has been much discussion of the 'tragedy of the commons' and of the best ways to manage common resources under contemporary conditions. State-centred natural resource management over the last three decades has achieved limited success. Subsequently, community-based management and local trade have become popular in environmental conservation rhetoric (see e.g. Hardin 1968, McCay and Acheson (eds) 1987, Berkes (ed) 1989, Ostrom 1990, Hecht and Cockburn 1990, Davies et al 1999, Gibson et al (eds) 2000). Most of the international environmental institutions involved attempts, it is said, to empower local people by giving them skills and opportunities to manage their resources 'wisely', without destroying them. In many places in Indonesia there are now training classes (Ind. penyuluhan) available. In the draft of the TNGH planning management Book I (1997) it is explicitly written that local people's appreciation of conservation activities can be improved through training. Note that the term used is 'improved', thus assuming that local peoples' understanding needs improving in this respect. Participatory Rural Appraisal (PRA) has also been used as a basis for developing non-land based activities (e.g. eco-tourism) and creating a demonstration plot and product for the programme of agricultural productivity. There are currently four Kasepuhan people undergoing Conservation Cadre training. In the

training course attended by warga members Mang Oo and Mang Ade in Sukabumi, urban-based trainers taught them about marketing strategies, different product qualities and designs. These teachers also provided information of the use of particular materials in relation to areas available for use and extraction, for example, whether rattan is being replaced by bamboo, which can be cultivated from any other field outside the forest. One simple 'performance indicator of success' was receipt of a certificate for attending this course. For the organiser of the training course, therefore, the success of such classes is in terms of the number of people who are trained, measured partly through the total number of certificates issued. Consequently for both parties, both the issuer and the receiver, the certificate itself acquires symbolic power, and may be seen as more important than the quality of the instruction itself.

5.4 The consequences of conflict over environmental resources

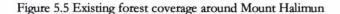
The uncertainty over access to forest, and the conflict which surrounds it, has led Sesepuh Girang to accept the fact that he has to cooperate in a government-sponsored forest-mapping project. Thus, with permission from the Sesepuh Girang, the INRIK, accompanied by about 50 Kasepuhan elders marked boundaries by planting honjé Nicolaia speciosa. The first task was to measure the inner circle i.e. the boundaries of the Ciawitali Entrusted Forest. The next stage was to measure the outer circle i.e. the boundaries of the open forest. Sesepuh Girang expressively showed his heavy hearted acceptance that, to be valid, all land contracts must now be written on paper. Kasepuhan experience of dealing with the government has led them to recognise that for security and influence to be obtained through official channels, formal written procedures are necessary. Only letters are considered to carry sufficient symbolic power. And maps represent a special case of the symbolic power of knowledge committed to paper (Harley 1992), which may be treated as a language which purposively can deliver certain messages. Mapping, cartography (or iconography) is an art of representation, an act in transforming an image of 'interpretation' i.e. meanings and appropriate values (Wagner 1986, Firth 1992). Maps may enscript 'invisible potencies' and ideological concepts (e.g. Munn 1973). In other words, the content and significance of information and the effect that maps may have are structured in accordance with intentions and means i.e. they are political products and represent strategic spaces (Lefebvre 1991).

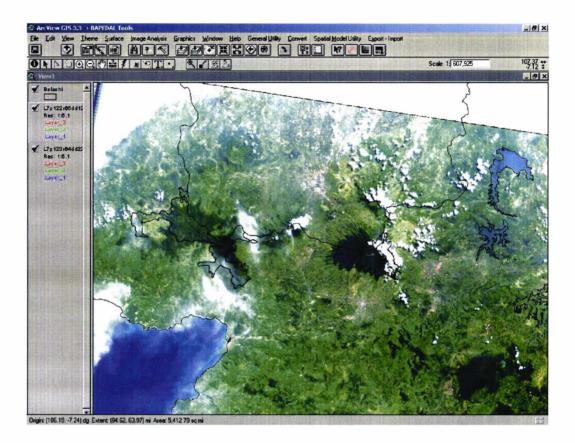
Indeed, in many cases the use of maps provides a way of preserving land rights. But it may also lead to what Peluso (1995: 400) calls 'freezing' the dynamics of social processes otherwise known as 'customary law'. Tsing (1999) shows for Mangkiling in the Meratus Mountains of Kalimantan, that the same forest is mapped differently by government departments depending on whether it has been designated as protected forest, production forest, as a potential transmigration site, and as village territory. But when local Meratus Dayak leaders and advocates draw a map to establish their land right claims, this is based on features of their social landscape, and on the association particular kin and neighbourhood groups have with particular areas of the forest and, social ties with particular leaders, including both current and past swiddens and protected adat forest. Environmentalists may go even further by mapping the areas which show overlapping boundaries between timber concessions, village territory, swidden areas and nature reserves, evidence which enables them to bring the issue into political debate at the state level.

It is not only amongst the Kasepuhan that elements of the natural domain (e.g. forests, river and mountain) represent an important spatial image of self-identity and a landscape of social space (e.g. Lefebvre 1991, Gow 1995, Morphy 1995, Thomas 1997). Based on this view, the question is who will benefit from mapping the Halimun, particularly the Kasepuhan adat forest. This can only be done through negotiation, since the survey is sponsored by TNGH and the data obtained is processed by city people, while Kasepuhan are, undeniably, the forest experts at the ground level. According to the Kasepuhan frame of references, it is not only a question of the significance of inner (entrusted) and outer (open) forest, but also of how to relate this to the zoning policy of TNGH which is based only on the character and sensitivity of biological and physical features of the forest. How does the validity of honjé Nicolaia speciosa as a boundary compare with the cement poles of TNGH? Inevitably, since perceptions and evaluations of the same forest space are diverse, this may produce different descriptions. There is another obvious potential source of friction with local non-Kasepuhan populations who have not been involved in this project. In many cases maps become a focus of conflict between parties, each of which argue and promote the legitimacy of their claims and their exercise of control over it (e.g. Orlove 1991, Pannell 1997 for a Indonesian case). In the process, knowledge and power are continuously negotiated between these parties. But how this power is negotiated in the Kasepuhan case remains un-answered since the project, at the time of my fieldwork, had not been finished.¹³

¹³ See Zerner (2003) on how material and cosmological constructions of maps and landscapes create a basis for conflicting interpretations.

Under these conditions of conflicting interests, it is not surprising that the forest is suffering extensive damage. Satellite imagery (Kementerian Lingkungan Hidup 2001) show the condition of existing forest of Mount Halimun (figure 5.5).¹⁴





The mapping activities have changed Kasepuhan experience of forest. The project, besides establishing the boundaries of forest, also documented various sacred sites within the Ciawitali Entrusted Forest. This is the first time that sacred sites have successfully been photographed. All sites were photographed except one, the old tree which resembling a naked woman, photographs of which it is claimed could never have been developed anyway. During the afternoon when the pictures were distributed among the people who gathered at the Bumi Ageung's kitchen, some interesting comments were made. Mang Utar, Mang Ayat, and some others were of the opinion that a successful attempt to photograph the sacred sites might be a sign, from Karuhun, that they should

¹⁴ However, again, different parties attach different meanings to these data, including what might be meant by 'un-forested' areas (see e.g. Sunderlin and Resosudarmo 1996). Moreover data taken from satellite images only reveals physical features, it does not directly inform us about ownership, particular land uses or practices.

nyiarkeun, publicise, the sacred sites so as to open Ciawitali forest. Emak, Sesepuh Girang's wife, had a different suggestion. Unsuccessful development of the old tree which resembled a naked women had been taken by her as a sign of shy thus meaning that the entrusted forest was not ready to be opened. Mang Absor, supported Emak's opinion, commenting that a sign should come from the alam itself, such as through the ripening of a *Mangifera odorata* tree. As yet no decision has been reached, and people are waiting for Sesepuh Girang to give his interpretation of the events. Entrusted forest (and its sacred sites) have now acquired for many a concrete reality which can be publicly discussed.¹⁵

Due to increasing limitations on access to surrounding land, there are Kasepuhan who increasingly make calculations as to the relative value of sawah and huma. Mang Arta and Mang Ardin said that, based on their calculation for the same pocong of rice seed and fertiliser per partition of a rice field, the production ratio of huma to sawah could be one to two or even one to three. For example, Mang Ardin suggested that one pocong seed of sawah would yield 40 to 50 pocong while the same of huma would yield only 20. The total manual energy requirement for maintaining huma is much higher than for sawah, the ratio being about two to one or three to one. It should be noted that the estimates were made on the basis of what might be called non-traditional huma where the fallow periods have been very much shortened.¹⁶ It is common that after one, or after a maximum of two years, people are compelled to return to former land. Under these conditions the soil cannot regenerate its fertility by accumulating minerals from the decomposition of organic matter. Neither is the soil structure improved by the long process of decomposition and accumulation of organic matter which facilitates the development of the soil fauna and microbial flora. The short fallow period also allows the seeds of weeds to remain viable. Consequently, while in traditional huma no fertilisers need be applied and no enormous weeding has to be carried out to obtain satisfactory yields, the Kasepuhan huma need and use all of these inputs which in turn require more energy and money if satisfactory yields are to be obtained. Because there is less taneuh surubuk (soil with humus) or taneuh hideung (black soil) which is regarded as taneuh subur (fertile land), Mang Kokon undertakes gésér-gésér, shifting within a single plot. It is commonly stated by Kasepuhan that since the 1960s their soil is

¹⁵ This was also the case amongst the Toraja of Sulawesi following desecration brought about by the intensive publicity relating to tourism (Crystal 1989).

¹⁶ It has been effectively demonstrated by Geertz (1963), Ellen (1982), and Dove (1985a) that the ideal conditions for conducting swidden cultivation are met where land is abundant and the population density low. These conditions allow for a long fallow period.

no longer fertile, that they have become dependent on fertilisers. There is, strictly speaking, no more fertile **huma** land. The price of fertiliser is already considered unaffordable. During 1998-1999 its price increased sharply two to three times, by about 300%. Subsequently poorly grown **huma** rice could be observed in many places in the area. With the application of fertiliser (trisuperphosphate or TSP) **huma** land needs to be taken care of throughout the planting season. **Huma** land fertilised by scattering fertiliser as evenly as possible all over the plot, in turn makes the **ngoréd**, first weeding, and the **ngarambas**, second weeding, more difficult, because the fertiliser also feeds the weeds. By comparison, application of fertiliser in **sawah** is at a distance of four fingers from the root of each rice plant, thus reducing weeds and saving fertiliser. **Sawah** cultivation also only involves control of water input.

The combination of higher yield, lower capital and lower energy inputs increasingly encourages people to shift from huma into sawah. Sawah offers better opportunities than huma. Many try to convert larger plots into sawah, leaving a small plot as huma. However, this process of change is risky and people therefore negotiate with the divine power by making a vow, for example that they will slaughter a goat, believing that the pledge will prevent disaster and bring a good harvest. In April 1999 Mang Ardin performed salametan mayoran when he harvested his sawah for the first time. He successfully converted his huma into sawah in the same agricultural year and most importantly its yield was good. For his blessing he invited several guests, slaughtered a goat, and they ate together in the rice field.

However, despite the problems relating to the shortage of fertile land, Kasepuhan are still strongly committed to the practice of **huma** cultivation. The **huma** cycle remains crucial to the representation of the **lalakon** of life. It is through practising **huma** that the cycle continues. **Huma** fields must still be planted before **sawah**, although **sawah** increasingly provides the bulk of the food that they eat. As Kasepuhan say, 'ti huma turun ka sawah, from **huma** down to **sawah**'.

5.5 The impact of schooling, media and government propaganda on Kasepuhan understanding of the world

Since the early 1970s the government programme of education has been extended to Kasepuhan.¹⁷ Schools have been established. The state-controlled national

¹⁷ Since 1969 the national literacy campaign (KEJAR) has formed the main part of the school program. The acronym KEJAR derives from the word <u>bekerja</u> (to work) and <u>belajar</u> (to learn). See e.g Soemardjan and Breazeale 1993:42-47 for comparative cases of the impact of the programme in different villages.

education programme differs greatly from the Kasepuhan traditional one, which is basically informal and based more on oral tradition, with traditional knowledge and values taught by the old to the young through the practice of daily life, rituals and story telling occasions. In this tradition the people have to believe and accept the teachings. Asking for reasons is often considered **pamali**, an action which can bring misfortune, for example for questioning the Sesepuh Girang's instruction, or why the warga are obliged to consume salt separately each time they have food. The cultural rules, at any one time, are fixed. There is little room for discussion, interpretation and disagreement. The teachings should be accepted. However the oral medium permits a degree of practical flexibility over time. As the oral teachings are individually-based in character, often face to face, they permit the sender to see, evaluate and decide which and how messages should best be delivered in accordance with the whole situation and condition of the recipients. This was admitted by Ki Radi (the Juru Pantun). He has to sensitively react to the audience situation. When he observes that his male audience, for example, are looking sleepy and bored he inserts jokes or humerous words into his story, particularly those which are a bit erotic, and these, according to him, are very effective in making adult males wake up. For example he humorously described the story of tongtolang nangka (lit. a young jackfruit) as a state of male arousal. The words are also selectively delivered according to a certain time frame, jaman. He may compare the abilities of past human to fly without the aid of a machine with the flying by using an airplane in the present time. Pictures which in the past were sent through dreams now become moving pictures sent by video, television or film. It is almost impossible to find a story which has exactly the same details over time and space. The Juru Pantun may remember word by word the story he has learned but through time he is permitted to modify it. The opportunity to modify the details of teachings through oral-delivery enable Kasepuhan elders to amend rules flexibly, in accordance with the changing alam.

By comparison, the national education programme is basically rooted in Western science and Western ways of thinking, preparing people to live in a 'modern' world which is vastly different from the traditional one. Writing, reading and mathematics constitute the core elements. Indeed, as argued by Goody (2000), it is the fixity of writing which makes the written tradition so different from the oral. A text is relatively unchanging whilst oral tradition is subject to change. He goes further by saying that written words and expressions allow people to make more abstract and logically consistent interpretations. Following Goody, therefore, formal education encourages a

distinct rationality, which trains people to think and question more openly and critically. Schooling, evidently, brings about changes among the Kasepuhan which change the relationship between the younger and older generations. The elders may no longer be respected as a 'qualified' means of acquiring knowledge and understanding of the world. The old belong to the 'jaman kuda ngégél beusi', 'when the horse was able to chew the iron', in ancient time. One example of this is when the young criticise the old for making a finger print rather than signing a letter. How can they be involved in the necessarily wider scope of the world (e.g. getting a job with foreigners, becoming a guide) when they still rely on this. The young can see little benefit in being the same as the elders. On the other hand, older people counter this by saying, 'yes we can do nothing, we are stupid, etc, etc', which is a subtle negation of what the younger people say. It shows the way the older people behave, i.e. being implicit and speaking allusively, while the younger are more outspoken and explicit. However, it is not clear that the younger generation understand the implicit criticisms. Equally, the older generation does not accept the direct and outspoken explicit critique of the young, which they feel is rude and disrespectful; schooling only creates a clever person for arguing not a person with pangarti (understanding), or 'pinter hanteu bener'.

Older people feel threatened by the attitude and behaviour of the younger generation, who value material things above everything else, and who do not take good care of the **huma** because of, for example, the attractions of gold mining. It is not only a matter of risking the harvest, but more importantly neglecting the **huma** may have serious repercussions, namely the anger of **batara-batari**, because Nyi Sri has not been respected. Some younger people see the knowledge which they can acquire through school as facilitating a better life, opening up opportunities for getting a job outside of agriculture, to get involved in the tourist and research business. They are discovering that it is possible to live without planting rice. Rice can be bought in the market, though the taste is not as good as their own produce. To stop growing rice is seen as being less risky than before.

Inevitably, competition for non-agricultural jobs is increasing. There are Kasepuhan who regard 'the closeness' to Sesepuh Girang as an important factor which helps them to get a cash-job. It is noted that a person who is able to tackle 'modern' things has more chance of obtaining a position near to Sesepuh Girang. Abah has hired three outsiders to undertake the administration, including making identity cards (Ind. Kartu Tanda Penduduk, KTP), dealing with Kasepuhan financial matters and external

affairs with outsiders, a driver who maintains the car and serves guests, and an electrical technician to operate and maintain the generator and the turbine. This policy has created difficulties among the warga. As these workers are seen to have a lot of spare time, free from agricultural work, people see them as 'ajag-ijig ngablu', 'hanging around and speaking meaninglessness' while being paid in cash and kind. But Abah counters this by saying that when, for example, the KTP administration was given to Mang Aang, who went to school till the second year of the secondary school, he made a mess of it. These outside workers also represent Abah in his business transactions in the towns. It was suspected that jealousy of this kind lay behind the refusal in 1999 of some Kasepuhan people to work at the Bumi Ageung to prepare the serah taun, complaining that the more educated workers were already there. This clearly indicates that local people see labour competition with outsiders who are better educated and skilled as an increasing risk to their traditional way of life.

Newspapers, though not regular and continuous, have reached Kasepuhan and are being read by people, primarily by the younger generation who can read. Consequently, the information reaches a relatively small number of people. But radios are listened to by many people, because it is cheap and convenient. Women and men listen to it while chatting or doing work, such as when cooking or working in the rice fields. Although the number of TVs is still small, people watch them in the Bumi Ageung and in neighbouring houses if they do not possess one themselves. Because of the entertainment value, people generally like radio and TV. One day the television informed them about the possibility of making 'hujan buatan', artificial rain, to break the long drought of 1997. Regulating alam, e.g. preventing the rain, has long been recognised among the Kasepuhan as something which can be done through the ability of special persons, pawang, who negotiate with the upper world inhabitants. But for the young sajarah may increasingly be managed through brains. This is another example of a potential conflict in modes of thought. Some people desire to learn more from the outside world, while others prefer to stick to ancient knowledge.

Another indication of the emergence of awareness beyond the ancient knowledge is found in Kasepuhan responses to government campaigns, for example those connected with the health extension services: <u>puskesmas</u> (Ind. <u>pusat kesehatan masyarakat</u>). These have included programmes on birth control and environmental health, such as the necessity to build and use MCK (<u>mandi</u>, <u>cuci</u>, and <u>kakus</u> = bath, washing and toilet) facilities. One influential programme was through the role of <u>mantri</u>

kesehatan (paramedics), popularly called by Kasepuhan mantri kaliling. 18 During my time in the field the Pak Mantri visited Kasepuhan villages every two weeks and during this time was kept busy. The cost was 10,000 rupiah for each consultation but this included medicines. 15,000 rupiah had to be paid if injections were given. While nonprescription drugs (e.g. decolgen, panadol, neozep - all kinds of paracetamol) were easily found in retail kiosks people often asked for medicines other than these ordinary drugs. Pak Mantri would give people medicines which, though not named, were believed by people to be different from ordinary drugs. On other occasions people asked for antibiotics or even insisted on being injected each time they felt ill, which would, according to them, instantly heal them. The tablets given by Pak Mantri are not just thought to cure related diseases but to be efficacious for general illness such as curing external wounds by putting the tablet directly onto wound. There were Kasepuhan who saved drugs given by the Pak Mantri in the hope that they might be useful another time and, perhaps, for another purpose. Overall the drug facilitates the practicality of conduct. Injection, inter-uterine devices and tablets, among others, were becoming a practical way to control birth. Modern medicines and hospital treatments were becoming familiar to cure illnesses. However cancer is generally talked about by Kasepuhan as a fearful disease which has only recently existed and which can only be cured by using modern medicines and a stay in hospital. Kasepuhan thought pertaining to disease, illness and sickness roles are increasing having to follow the jaman (the times) with respect to gélo (madness) which is attributed to a loss of kaéling due to misfortunes, but also is increasingly seen in Western terms as a psychiatric illness which should be cured in hospital.¹⁹

In a time of <u>reformasi</u> actors and political parties are each delivering new ideological messages. Likewise, NGOs (e.g. Biological Science Club and Yayasan Ekowisata) are bringing their own agendas to the area. Local people are often confused as the messages do not always contain the same information and are sometimes conflicting. For example, the messages from the government are generally different from those from the NGOs. One simple example of this was that concerned with the extraction of rattan from nearby forest areas. According to one of the NGOs it is acceptable as long as it is a reasonable amount, '<u>asal secukupnya</u>' while TNGH formal training strongly advises to people completely replace the use of rattan with bamboo.

¹⁸ A <u>mantri</u> is a person (paramedic) who has been trained by the government to deliver and to promote health services, while **kaliling** is 'moving around'; Mantri kaliling are thus health officers who move from one village to another village much like British district nurses.

¹⁹ For comparative cases regarding mental illness as caused by misfortune see e.g. Horikoshi-Roe (1979), who describe Sundanese in different parts of West Java, and Schmidt (1964) on the Iban of Sarawak.

There are NGO representatives that frequently express themselves as being very close to local people. Likewise they are seen, by local people, as being on their side. So, in judging the risks which they face, Kasepuhan have difficulty in knowing what information should be trusted. In other words, the question of which source of information should be trusted becomes crucial, a very fundamental question being whether Karuhun, government or other claims are the more important. Is Sesepuh Girang still to be regarded as a reliable source of information? Furthermore, it is much easier to obtain information from newspapers, radio and TV and from other sources than from the Karuhun via Sesepuh Girang, which some Kasepuhan sometimes say involves time-consuming rituals. Many people from the towns also act knowledgeably, e.g. on weather forecasting and on the gold content of ores. This is a development being faced by Kasepuhan. Undoubtly Abah and the older people are aware of this although they never discuss it openly.

5.6 Conclusion

Education is the driving force behind change in many societies. Under present conditions Western knowledge and skills are still limited in Kasepuhan, accessible only to a small number of people and can still be treated on a case by case basis. Skills and knowledge based on ancient tradition and oral teaching, increasingly, cannot compete where more people are willing to engage with wider, literate communities, beyond the Kasepuhan local environment. Thus, even Sesepuh Girang encourages his son's ambition to become a helicopter pilot, and instead of providing a traditional 'lion like' circumcision float, constructs one which looks like a helicopter, and which is labeled with TNI-AU (Tentara Negara Indonesia - Angkatan Udara; Indonesian Army; Air force) (see. p. 47).

At the same time, some Kasepuhan customs are self-consciously being preserved and formalised through writing, which eliminates the advantages flexibility of ancient oral rules, 'freezing', as it were, the <u>adat</u>. Such traditional flexibility allows people to individually negotiate and elaborate opportunities which they have to deal with in the ever changing **alam**, an issue which will be described further in the next chapter.

Chapter Six

Rice Diversity, Sharing and Risk Management

In Kasepuhan thought sajarah frames the alam. Each cycle of the alam has its own era (usum) and its own character (perbawa) determined by the alam's trajectory. The idea of pancer-papadon further explains how the alam is encapsulated through its various component parts, in which each component is complemented by another of an opposite quality (lawan; see p. 111). Such complementary relations are called by Kasepuhan katurutan (affinity; see for example, the case for material substances p. 70-1, for land p. 71-2, and for plants p. 86), and the actions of individuals are constrained and guided by katurutan. It is awareness of these limits which restricts the practice of sharing among Kasepuhan individual households. The owner-batur relationship particularly reflects this. As a result, diversity has become the key feature of Kasepuhan risk management. This chapter begins with a discussion of the management of internally and externally induced risk through the selection of rice landraces to be planted, and then discusses the process of identification and the social character of Kasepuhan swidden subsistence practice.

6.1 Selecting landraces for planting

Each Kasepuhan rice plot is usually planted with three or four different landraces, with different colour-coded landraces in separate plots. The explanation for this lies in the Kasepuhan notion of **katurutan** (affinity), where each individual household has a particular landrace affinity¹ relating to the **naptu** (unique attributes) and **turunan** (descent) of those respective households. According to rice affinity, landraces are categorised in terms of three colours i.e. **beureum** (red), **bodas** (white) and **hideung** (black). People consider colour to be **jelas**, the most obvious feature present in all landraces. Colour is, most often, the first reaction people give when commenting on respective landraces.

As individual households may wish to obtain a particular landrace but be limited by their rice affinity, they seek to cooperate with other households. Although a particular

¹ The concept of affinity is found also among Dayak farmers in Borneo (Seeland et al 2002). Dayak shifting cultivators in Apau Ping village of East Kalimantan know these personal attributes as 'kepribadian' (Setyawati 1996:12). The sawah farmers in Ciasem Baru village on the north cost of West Java say 'padi yang ngejodoh', rice plants should suit your own personality (Winarto 1997:2). Although these writers recognise the decisive role of farmer personal attributes there is no further explanation as to how these personal preferences are worked out in any practical sense.

individual household may own a piece of agricultural land this does not necessarily mean that he or she has an absolute right to make all the decisions with respect to that land. Thus, decisions concerning what landraces should be planted are the outcome of a negotiation between any given landowner and other households, batur, in a type of share-cropping arrangement.² Selection of rice and distribution of labour is defined through an owner-batur relationship. While batur literally means 'another person', it implies that the land owner and the worker have equal rights, and that 'help for' and 'work for' are distinct. This we shall see later throughout this narrative. Kasepuhan divide their kotakan (rice field plots) into two: the edges and the inner part of the plot. A single Kasepuhan agricultural field generally measures about 400 square meters. The inner part of the plot is usually planted with three or four different rice landraces. These plantings are called kepakan rice. The kepakan, to some extent, is the joint property of the landowner and the batur, established through matuh, a long-term relationship between a collective group batur and a particular landowner. Over time, spanning several generations, certain batur are established as 'the owner' of each particular kepakan rice. It is thus the case that these individual households the **matuh-batur** – are obliged to **bantu** 'help' the landowner with respect to that particular kepakan. In return, the matuh-batur will obtain a bawon kepakan. Matuh is reciprocal, and a bawon is a share of harvested rice distributed between the owner and his batur directly after work on a particular day. The share is thus a pre-drying rice. The share ratio is five to one, which means that for every five bundles of rice (approximately four kilograms) which the batur produces he gets one. The right to help must be guaranteed by the owner of the land i.e. he should not allow someone else other than matuh-batur to help him on that kepakan. If another individual household has an interest in this particular kepakan he has to seek the permission from the matuh-batur rather than from the owner of the land. If permission is granted then that part of the kepakan, which is given to another individual household, is called derepan, and accordingly this another individual household can obtain his share. The **derepan** negotiations usually happen at a time near to the harvesting season.

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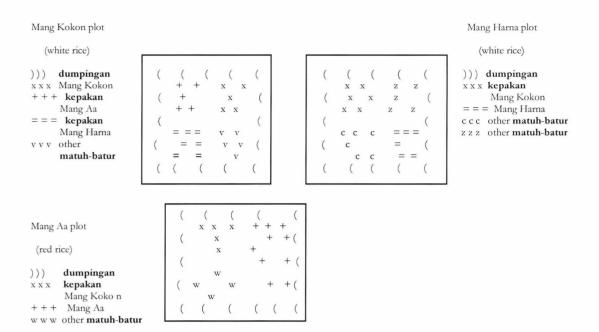
² Many studies have shown how crops are shared in various ways in Indonesia (e.g. Iskandar 1998, Collier 1981). Alhough the amount of sharing and the labour arrangements in many cases, show considerable differences, there are some common practices of share cropping among the population of Java, such as bawon (i.e. where the harvester will obtain part of the yield), maro (i.e. where land is worked by someone else but then half of the yield goes to the landowner) and ngepak-ngedok (which means that by giving labour during the planting stage there is an increased chance of being involved in the harvest).

A particular landrace planted along the edges of a field, along the dykes, is called dumpingan. The rules relating to dumpingan are similar to those applying to kepakan: it is established through the matuh relationship. It can also be given away by the matuh-batur to another household as derepan. Dumpingan differ from kepakan, however, in that they are positioned along the edges of a plot, which limits landrace choices. Because the site is more exposed to the external elements most of Kasepuhan use glutinous rice which significantly have strong straight stalks. This characteristic of glutinous rice enables it to withstand the wind, prevent the dykes from eroding, and in turn keeps the dykes from collapsing, which otherwise restrict accessibility.

The collectivity of individual household **matuh-batur** has the right to participate in deciding which rice landraces should be planted. Though there are no strict rules as to what percentage or how much the **matuh-batur** receives, on the basis of their longstanding relationship the landowner and **matuh-batur** usually reach an agreement without too much dispute. The **matuh-batur** - landowner relationship is arranged in such a way that **matuh-batur** has to 'help'. The help, in a sense, is that the **matuh-batur** is obliged to be involved during seed selection and preparation, and to complete his work on his entire **kepakan** at the planting and harvesting stages. Though the seeds have to be provided by the owner of the land together with other expenditures on material agricultural inputs, such as fertiliser, it is also common for the **matuh-batur** to contribute seeds, but, of course, this must be within the range of seeds in accordance with the landowner's rice affinity.

Three individual households, those of Mang Kokon, Mang Harna and Mang Aa involved in such a relationship, are pictured in figure 6.1. In respect to rice affinity Mang Kokon and Mang Harna share an affinity for white rice while Mang Aa works with red. Mang Kokon aligned himself with Mang Aa in a reciprocal relationship through which each of them were able to obtain rice which they do not otherwise have access to: Mang Kokon obtained red while Mang Aa, obtained white. An alignment between Mang Harna and Mang Kokon emerged as both of them wanted to secure white rice. Other **kepakan** in each of the plots of Mang Kokon, Mang Aa and Mang Harna are aligned to other **batur** beyond these three households.

Figure 6.1 matuh-batur relationship between Mang Kokon, Mang Harna, and Mang Aa

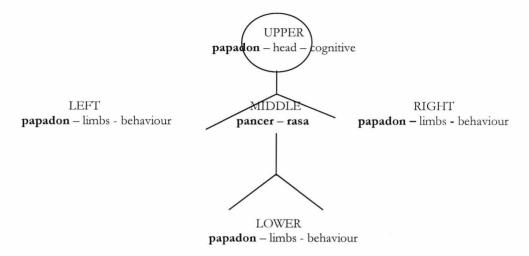


The matuh relationship between landowner and batur is not strictly defined by kinship, but can alternatively be based on various social relationships, such as friendship or neighbourhood. Although matuh relationships are always considered ideally to be longterm, particular situations do not always remain the same i.e. circumstances may change. For example, changes may be necessary following demographic shifts within households, most fundamentally in relation to marriage. It is not uncommon that after marriage men move out of their parental household to live with their wife's family (i.e. uxorilocally), or women accompany their husbands to wherever they live (i.e. virilocally). Consequently, the matuh relationship is always being re-negotiated and re-established through time. Furthermore, such changes in circumstances may affect the household affinity i.e. the new members of the household may bring one or more new rice affinity (while at the same time this may reduce the range of rice affinity in the original household). According to this idea, the rice affinity is opened for re-interpretation and is being dynamically changed. It is understandable also that since affinity is defined by a single household through kin lines in order to obtain a wider but not dissimilar range of landraces, individual households should seek matuh-batur from beyond the realm of kin relations if necessary. In the example above, Mang Kokon has, strictly speaking, a kin relation with Mang Harna but not with Mang Aa.

Another variation in the owner - batur relationship is the maro system. In the case of maro, rice affinity, labour arrangements and all expenditure on the land is borne by the batur themselves (that is, the linked households). Maro, literally, means 'make it half', that is, once deducted by the bawon share (one-fifth of the yield), half of the yield goes to the landowner and half to the batur household (of which there might be more than one although this is very rare). This arrangement becomes prevalent when an expanse of land is cultivated by batur households because the respective landowners have insufficient labour of their own, or when the land is located a long way from the owner's house. The maro relationship is based on trust, percaya. For example, Mang Kokon owned one huma plot and one barn in Cikarancang, a village about two and half hours walk from where Mang Kokon's family lives. This **huma** was inherited from Bi Heni's (Mang Kokon's wife) parents. Because of the distance it was more convenient to use maro with Bi Heni's brother, who lived near the huma. Every year the brother reports back on the yield by saying only that Mang Kokon's share has been put into his barn. Because of 'trust' assumption, it is accepted that there is no need for Mang Kokon to check in the field itself. Another varient of maro is where the cost of fertiliser is divided between the owner and the **batur**. Usually, the owner pays the cost of fertiliser used by way of deduction from his incoming maro yield which was, in 1998, per one kilogram pre-dried rice around 1,100 - 1,300 rupiah. Thus Mang Kokon obtains 20 bundles of rice (approximately 80 kg) of his maro yield from his huma but because he has to pay half of the fertiliser cost at 60,000 rupiah he only receives eight bundles of rice. For one huma plot (approximately on average 400 m2) it needs about one 50 kilogram sack of fertiliser which costs 120,000 rupiah.

Developing the idea of rice affinity further, there are several sets of factors which need to be taken into account when reaching decisions as to what landraces are to be planted. The selection is described as being associated with the five symbolic parts of the human body, the **pancer** (trunk) and the **papadon**, head, and limbs. The trunk represents human affective qualities (**rasa**), the head is the focus of cognitive ability/reason (**kapinter**), and the limbs, are areas of action (**lampah**) (figure 6.2). Thus, rice plants are selected carefully in order to obtain a balance of affective, cognitive and practical qualities: the first set is moral obligations and affective considerations. The second involve growing rate, suitability to elevation, and stock availability. The third involve the tangible characteristics of rice but also with respect to position in a plot.

Figure 6.2 Metaphorical human body representing the concept of pancer-papadon



6.1.1 Affective qualities

Kasepuhan divide rice into three categories which reflect moral attributes: buhun (ancient), biasa (regular) and ketan (glutinous) rice. Buhun rice, commonly called Ageung (lit. large) or asal (lit. original), is regarded as the most sacred. Farmers must plant buhun rice, such as Beureum Karang, Srimahi and Srikuning, in the pupuhunan (the ritual center of a swidden) of, at least, their first huma to give symbolic validity, sah, to the whole farming activity. The buhun oblige people to complete properly all stages of ceremonial agricultural activity, as described in chapter four. In addition, the buhun rice can only be consumed as a staple food for main meals, which means that it cannot be processed further, for example as cookies or snacks. These various restrictions and beliefs ensure that Kasepuhan maintain buhun characteristics as part of their aggregate rice genome. Biasa rice, by contrast, is not surrounded by such rules, and it is up to an individual farmer whether, for example, he might perform the **mipit** ceremony (initial ritual before harvesting) or not. Ritual is, therefore, optional, where their rice field does not consist of buhun rice. The biasa can be processed into snacks and cookies. In the case of ketan rice, associated rituals are more relaxed in that the mipit and nganyaran (tasting new harvest rice) ceremonies need not necessarily be performed. In general Kasepuhan call ketan rice ketan (neglecting the words béas, rice) the reason being that ketan is not used as a staple in main meals but rather most of it is consumed in the form of snacks or cookies.

Furthermore, which rice landraces are selected for seed not only depends on the above category characteristics, but also on the context of **mabay**. Such **mabay** activity before **mipit** reflects the importance of selecting rice seed which has come from the best context, **sauyunan**, walking in the same direction, and **spamikiran**, having the same thoughts and ideas (see p. 115).

6.1.2 Cognitive qualities

In terms of growth rate, rice landraces are divided into two groups: leuir and hawara. Leuir rice has a slower growing rate and is planted at cooler and higher elevations than hawara. Management of time in terms of rice growing rate and elevation is important for Kasepuhan. Since each Kasepuhan household prefers to harvest their rice fields at the same time with other households, this has consequences as to what landraces are selected and grown at what altitude. Thus the planting of slower growing rice at higher elevations should take place earlier than faster growing landraces at lower elevations. If someone is late in planting their rice seed, they will try to catch up by harvest time by planting a faster growing rice, regardless of elevation, even though in the end this may result in a lower quality yield (teu beuneur). The basic objective in achieving unison is to start and finish agricultural work at approximately the same time.³ Each household ensures that their rice plants ripen and are ready to be harvested at the same time as plants in fields belonging to other households, whilst the harvest as a whole has to have been completed before 'Kidang medang turun kungkang, when the star constellations of Kidang and Kerti are low in the sky to the west, at a time when kungkang (Leptocorisa acuta) will attack the rice plants'. Sometimes this latter danger is referred to as kaméian, lit. 'to reach the month of Mei', a term which is taken from the word May, the fifth month of the Western calendar. This unified strategy effectively ensures that pests and diseases do not become concentrated in the fields of just a few households, but instead are widely spread, thus reducing the risk to individual households by distributing macro-predators throughout all the Kasepuhan fields (especially those belonging to a single settlement). A reduced risk of animal attack, therefore,

³ There are various ways in which people use the rate of rice growth as a strategy to minimise risk. Like Kasepuhan, the Kantu of West Kalimantan (Dove 1993) use it as a means to achieve a common harvest. In contrast to this common strategy, in Tai-Lue village in Northern Thailand, varieties of rice which mature at different rates benefit farmers so that planting and harvesting time scales are arranged in accordance with individual household labour availability (Moerman 1968).

is achieved through **ngabagi**, sharing, whereby the costs and benefits are distributed throughout the population.

The hasil (lit. results) of farming activity are claimed by Kasepuhan to be teu-nomi (lit. not based on economic calculation). The process is described by them as follows. First men from each household measure the jumlah (total) rice production for the current year in terms of the number of rice bundles. This does not include the bawon taken by batur but consists of the bawon obtained from batur. The time taken for each landrace to dry while the rice bundles are hanging on the bamboo rack is carefully noted. After about two months, because the drying rice bundles have now shrunk, the men re-form the rice bundles, and, by comparing the total rice bundles before and after drying they are able to measure how much each landrace has shrunk. Consequently, men are able to compare the yields of different landraces and note which of them produce the most grain, and how each type is fairing with respect to other growing qualities which are regarded as important. While depositing them into barns men count these newly drying rice bundles to give total production for the current year. Men add these rice bundles to the stock remaining from previous harvests to calculate the total amount available for each landrace. Each household is able to talk fluently about their stock (and its various landraces). Each household will also remember how much labour, fertiliser and rice bundles seeds they have used, and they will also be aware of the quality of seed rice bundles they have planted in a given year and how this compares with the yield they ultimately obtain. New rice landraces are evaluated further by the women of the household at the time of nganyaran, tasting new harvest rice. It is at this stage that each household finally knows the measure of their success for the current year through calculations made and announced by the wife, including the success of particular landraces, especially, if any, new ones. Success is, therefore, not only defined quantitively in terms of jumlah (i.e. production) but also contextually to indicate the hasil (i.e. results) of each individual household. Of course, to enable this comparison each household must ensure that the yields for different landraces, particularly the new ones, are kept separate.

When harvesting, farmers use an étém (Ind. ani-ani; finger knife) which enables them to feel, to see and to discriminate between and closely discern the character of every single seed and rice panicle. It was with attention to such detail that during the 1999 harvest five men from Ciptarasa got very excited when they found, in Cisarua, a landrace with characteristics which they had never seen before. The panicle of rice grain of this suspectedly

new landrace, according to them, resembled a ranté (necklace), but was otherwise very similar to the landrace labelled Sisit Naga, 'dragon scale', though not obviously belonging to either. The new rice specimen was carried to the Pamakayan to be identified, stored and given a provisional name. Generally the name selected will indicate its form, colour, taste and relationship to an existing rice landrace (e.g. paré Ketan Beureum = red ketan rice), other plants (e.g. Cere Kalapa, cere is a group of existing landraces and Kalapa is coconut), animals (e.g. Banteng = wild buffalo), the disposition of an animal (e.g. Gajah Bairah), the disposition of a human (e.g. Raja Dénok), and fruits (Jambu = guava). It may also indicate the site where it was discovered e.g. Ceré Sunli, which is an acronym formed from sapalih lisung, and thus meaning 'Ceré found on the side of a rice morter'. Or a label may be derived from the name of the person who brought a new landrace from outside e.g. Ceré Ahali; 'Ahali' being the name of a person. During the **ponggokan** following the 1999 discovery of the Ranté landrace, this specimen was carried by the Pamakayan to Sesepuh Girang, disalametkeun, to receive a blessing. The Pamakayan handed over the specimen to Sesepuh Girang in the presence of some other elders. The Sesepuh Girang inspected the specimen: examined the stalks, the seeds and turned it over. Several elders volunteered their opinion on the matter. Sesepuh Girang asked no questions and made no comments. After a while he nodded his head several times as a sign that he agreed with what was being said, before explicitly giving his approval that the rice specimen be officially recognised as a new landrace. The provisional name Ranté Hideung (black necklace) then was proposed to Sesepuh Girang by the Pamakayan. There was no further discussion as to the new name: Sesepuh Girang simply agreed. It was then the responsibility of the Pamakayan to add the name of the new landrace rice to the existing written record. The existence of this new strain of rice was not announced publicly, but through the rituals of ngembang and the serah taun, which follow the ponggokan, many people became aware of the existence of this new landrace. What is interesting and significant about this account is the way in which new landraces are given symbolic validation through the official naming by Sesepuh Girang.

Each household examines their yield carefully and secures good seed which might be suitably planted in subsequent years during **mipit** (see. p. 115-116). But since farmers do not necessarily always follow the general rule that the growth rate is correlated with elevation

⁴ Similar categorisation (in terms of form, size, shape and manner of origin) is described by Dove (1985a) for the Kantu.

they have to re-arrange their seed stock. Thus, while the ancestrally-sanctioned advice for the 1999 agricultural year, mediated through Sesepuh Girang, was that people should plant slower growing rice because the prediction for that year was that it would be rainy, cool and windy, the advice for the 1998 agricultural year had been to plant faster growing rice. That disseminated information with respect to planting strategies for the next agricultural year might differ from those adopted during the current year encourages households to look for seeds which might fit with the new advice. For some, the occasions of **ponggokan**, **ngembang** and **serah taun**, when many people are gathered together at Ciptarasa, give appropriate opportunities for members of different households to discuss the merits of various landraces, compare the advantages and disadvantages of each, and thus contribute a stock of knowledge which can be used by individual households in the process of making planting decisions.

After discussions have taken place within the household as regards planting strategies, if it is considered necessary, men proceed to exchange their seeds. As a result of such exchanges a consensus emerges, which is given symbolic force by attributing this consensus to the ancestors, the Karuhun. The exchange of seeds may be conducted langsung (directly and immediately), or diinjeumkeun (lit. by 'lending'). An immediate exchange is a two-way process which benefits both parties at the same time. This usually happens where one household is clearly seeking a particular landrace which it does not possess or of which it has an insufficient quantity and quality, and where at the same time it has a surplus of a particular landrace in demand by a second household. Such an exchange may be prompted when there is a change in the situation of household, for example following marriage, when the household affinity must be re-determined. 'Lending' is a longterm, delayed exchange which occurs where there is a demand in one direction only. In this case the lender will accept any landrace from the borrower on the basis that these may be useful at some, as yet undetermined, point in the future. Although the seed may not be of a landrace required in that year, the lender may insist that it be of a higher general quality. Thus, this increases the success with which a household can buffer against some future, as yet unknown, risk.

It is evident that most Kasepuhan followed the new directive for 1999, whereby most of them planned to plant slower growing rice, even at lower elevations where this would not normally be appropriate. But, equally, just because the 1998 advice had been to prioritise faster growing rice, this did not mean that all households complied and planted nothing else. Indeed, many successfully planted slower growing rice. Members of different households do share their previous and present experiences, and whilst they discuss their future strategies, they, however, describe and themselves as having their own needs and conditions. For Ki Karma the rice stock is an important factor which led him to plant faster growing rate rice last year. He needed this type for **helaran** celebrations on the occasion of his daughter's circumcision. Every year each household inspects the rice stored in barns and turn the stacks in such a way that the more recently harvested rice is at the bottom, and the oldest at the top. In this way rice is consumed consistently with the harvests. For example, rice harvested in 1998 will be consumed before that harvested in 1999. This reduces spoilage, such as visible discolouring (e.g. blackening) although discoloured rice is still consumed. By inspecting their rice, individual households are able to estimate which landraces are in short supply, in terms of what is needed for daily consumption, ritual needs, or for snacks to accompany important **salametan**, such as those held for circumcisions and weddings.

6.1.3 Practical qualities

Seed rice is selected by Kasepuhan people on the basis of practical considerations as well, a number of which relate to the ease of harvesting, which in turn determines the speed at which harvesting can take place. The speed of a harvest is influenced by many factors. To begin with there is the height of the plant. Plants which produce rice panicles at shoulder height are the most easy and speedy to harvest because the harvester **teu cangkeul**, 'does not get tired' as quickly as when harvesting shorter or taller varieties. Srikuning is a good example of a landrace displaying this feature. In contrast to Srikuning most **ketan** rice plants have panicles which are higher than shoulder height. The elasticity of the stem is another factor. Hard but brittle stems (e.g. Srikuning) are easier to cut than soft but tough stems (e.g. mostly of the Ketan) which have to be pulled. The regularity of planting is another factor to be considered. Regular planting, such as that found in **sawah**, where rice is planted in rows, makes harvesting easier by allowing the harvesters to walk between the rows. This is not the case in **huma** where the seeds are sown and the plants grow in a random pattern (figure 6.3). Figure 6.4 show harvesting activity in **huma** plot. The growth pattern of the plants also influences the speed of harvesting, and landraces with a stalk which grows straight and does

not lodge (Ind. ambruk) are easier to cut. The final factor which influences the speed of the harvest is the position of the plants in a plot, as plants at the edges are easier to harvest than those in the centre.

Figure 6.3 Comparison of huma and sawah planting patterns

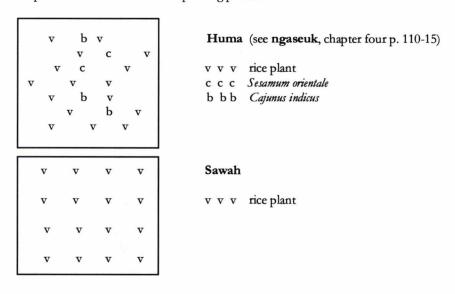


Figure 6.4 Harvesting activity in huma plot



6.2 Identifying rice landraces

Kasepuhan data provided by Budi (1997) – based on Adimihardja's compilation (1989) and the Sesepuh Girang's note (1996), confirmed in turn by the Pamakayan - indicate that in 1997 there were 146 rice landraces⁵ (table 6.1). My own field research, conducted during March-April 1999, yielded 78 landraces. The collections were made in several agricultural areas of the Kasepuhan region, at elevations between 700 and 1200 meters above sea level. However, only 50 specimens were actually collected (table 6.2), as the owners had not conducted **mipit** (a ritual to initiate rice harvesting) in the fields where the remaining landraces had been identified.

Several factors may explain the difference between my field data and the Kasepuhan official data. First, my sampling locations may not have exhaustively represented the diversity evident in the entire range of Kasepuhan rice fields. Detailed studies of a wider range of plot locations, elevations and rice population distribution is probably necessary to capture all this diversity. Though officially Kasepuhan have a total of 146 landraces, some are rare and/or are unevenly distributed, and the figure may include stored seed as well as planted rice. An example of one of these landraces is Umpay Lutung (No. 126). On the other hand, some landraces, for example, Srikuning (No. 114) dominate particular rice fields.

Second, the names of landraces in the list do not always match those which are obtained through fieldwork. My own enquiries yielded names which were not included in the list: Gajah Panjang, Leuir Loyor, Leuir Badigal, Pacing, Ketan Mujair, Ketan Ranté, and Maliwarna (placed in italics in table 6.2). Whilst Gajah Panjang was, defined by people in the field as being synonymous with Gajah Bairah (No. 59) the others were not found, at least not in the fields studied, under a different name. The descriptions for Ketan Alean (No. 128) are the same as for Ketan Lepo (No. 141), though I did not encounter this directly in the fields. Field research indicated that the same landrace might be referred to using several names, although since these names are widespread and known by most Kasepuhan, especially adult males, they are more likely to be shared synonyms rather than geographical, ideolectal or socially distributed variants. Thus, in table 6.1 Gajah Bairah (No. 59) and Raja Dénok (No. 100) appear to be synonyms for the same landrace, as are Tampeuy Hideung

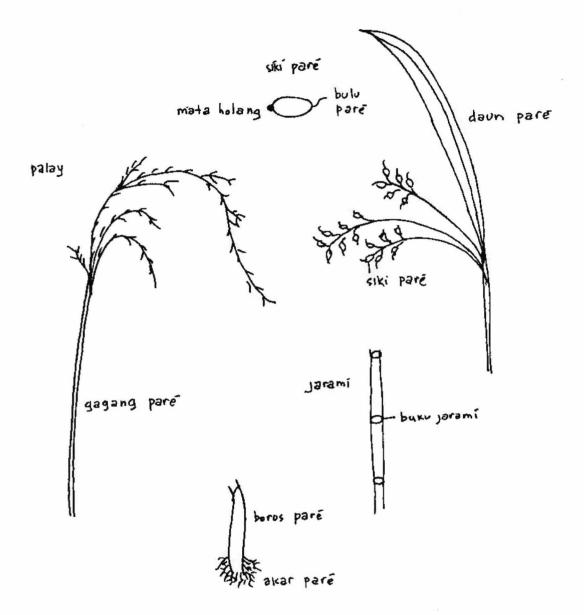
⁵ The word 'landrace' here (following Iskandar & Ellen 1999) is used to refer to a locally defined farmer category and is distinct from the scientific concept of genotypic variety.

(No. 120) and Séro (No. 111). Again these conclusions are based on descriptions provided by people in the fields, the list suggesting that they are different: Gajah Bairah is **buhun** rice and is planted in **sawah** while Raja Dénok is **biasa**; Tampeuy Hideung is planted in **sawah** while Séro is planted in **huma**.

People like to discuss and compare the merits of different rice landraces; their physical characteristics (colour, taste and form) and, their ecological properties (e.g. vulneralibity and tolerence with respect to temperature, rainfall and disease). One person might describe the same landrace differently from another person, but it is not necessary for them to reach a single agreed view on the matter. This kind of variation in the representation of knowledge was more apparent amongst those cultivating rice in more distant areas and/or at different elevations. Further as rice affinity influences a particular person's knowledge, it thus follows that the knowledge concerning a particular landrace may well only be shared by persons living in a given household. Different persons have particular pre-delectations as to the respective categories of rice. Such idiosyncratic interest has an impact upon what more landraces become established as well as indicating the limitations of personal knowledge. Mang Aa, for example, has an affinity for red landraces and so consequently might be expected to show more interest in, and have more experience and knowledge of, these landraces.

The technical process by which individuals identify what landraces they are dealing with has been described in terms of cognitive models for distinguishing features (see e.g. Conklin 1977) but seldom in terms of actual ethnographic situations. To illustrate how the process of identification works for the Kasepuhan, I provide here descriptions of particular occasions where identifications were made (figure 6.5 provides a diagram of parts of the rice plant in Kasepuhan terms). It is clear that the process is synesthetic (relying on the combined senses of smell, taste, sight and feel), is always contextual and is often socially debated.

Figure 6.5 Kasepuhan terms for parts of the rice plant



One day Mang Kokon and I worked together in collecting specimens of different rice landraces. In accordance with what we had agreed during a conversation the previous morning with some people concerning the harvest situation, we decided to visit Cisarua first, a village at about fifteen minutes walk from Ciptarasa at approximately the same elevation, that is about 700 meters above sea level. On the way, Mang Kokon discovered a plot which, he suspected, had not been previously sampled. We approached the rice bundle hanging on the bamboo rack. I include the following description from my fieldnotes;

Mang Kokon takes the siki paré (seed/grain), inspects it for size, distinguishing between gedé (large), sedengan (slightly-smaller), leutik (small); length, distinguishing manjang (long), sedengan (slightly-shorter), pondok (short); and distinguishing shape: buleud (roundish), lonyod (oval), gendut (thick), gépéng (flat). He examines the cangkang paré (skin or chaff) colour to establish whether it is hideung (blackish), beureum (reddish), or bodas (whiteish). He looks to see whether it is buluan (hairy) or not. Then he peels the cangkang paré (chaff), wipes the kulumud béas to examine its texture, lemes (fineness), kasar (roughness), ipis (thinness) kandel (thickness). He peels the kulumud béas from which he can determine the colour of the béas kernel in order to see whether it is bureuk (opaque/dull) or hérang (translucent). Mang Kokon breaks the béas kernel between his thumb and index finger, and from the fracture line is able to discern if it is **getas**, and thus **muruhpuy** (hard but easily shattered), or **liat** (pliable), that is **uduh** (soft) but cepel (dextrinous/sticky); he puts it on his tongue to taste, crushes it with his teeth, and feels the grain in order to establish whether it is ngeusi (heavy), gambos (light), amis (sweet), kesed (starchy) or rangu (chalky), and whether it is hard to chew or not. He then looks at the gagang paré (stalk), paying attention to the warna (colour), kandel-ipisna (thickness), hipu-teuasna (Ind. lunak; softness), ngiring (Ind. lentur; pliability), and as to whether the surface is leucir/mangkilat (waxy) or not. Finally, Mang Kokon announces that 'this is Gajah Panjang'. He then asks nearby farmers working these respective fields whether the rice they are harvesting is Gajah Panjang. He looks satisfied when their answers support his judgement. It is not necessary for him to look at the jarami (main stem), buku jarami (nodes) and daun (leaf) of the tangkal paré (rice plant), which remain in the field.

On another occasion we were looking for different landraces in Cicemet. In one huma field we got involved in a lively conversation with some men and women as they were harvesting as to the identity of a particular landrace. They examined the rice grains in the same way Mang Kokon had (as decribed above). The women were quieter than the men, but contributed by giving their opinion based on their work and experience during nutu, rice pounding, as to how each type of grain requires different degrees of effort. I shall describe here the rice pounding process.

The grains are pounded to peel the edible grain from the **cangkang paré** (chaff). The chaff which is now called **huut**, is separated from the grain by **ditapikeun**, winnowing. For this purpose the grains are put on a **nyiru**, a round shaped bamboo mat woven, and by swinging, shaking and tossing it the chaff is carried away by the wind while the grain falls on the mat. Now we have the grain without the chaff, **béas**, which is ready to be cooked. However, some people prefer to pound the **béas** further for a second time, **nyosoh**. During the process the **kulumud béas**, outer layer of the grain, is peeled off. This outer layer is now called the **bakatul**. Also the **mataholang**, the top end of the grain, comes off from what is called the **beunyeur**. The process of winnowing is repeated to separate **béas** from the rest, **dedek** (i.e. the mixture of **huut**, **bakatul** and **beunyeur**).

After discussing the matter for a while they found that they were unable to agree. They then proceeded to examine the jangkung-béké (height) of the palay (panicle), and jarami (main stem) by counting the buku jarami (nodes), measuring the buku (internodes), looking at the colour of the nodes, the colour and smell of the boros paré (young leaf sheath), and the colour and character (e.g. pliability) of the panicle and main stem. On the basis of these respective details they agreed that it must be classified as gedé in size (large), and that it belongs to the **buhun** (ancient) variety because there was a trace of mipit activity, and that it gave an impression of attractiveness. Whilst the local people of Cicemet insisted it had just one name, Raja Dénok, Mang Kokon insisted that it had another. Mang Kokon believed it to be Gajah Panjang, while a third party, from Cianghangsa, said that it was Gajah Bairah. According to Mang Kokon the difference is in the jarami. The Gajah Bairah should be semu hejo, a bit greenish, while Gajah Panjang should be semu bodas, whiteish. These three names, however, include the connotation of 'large' where raja means king and gajah is elephant, and is also reflected in having an attractive or sexy body impression, **dénok**, whilst the term **bairah** is a state which is considered to promote feelings of arousal. Panjang which lit. means long in this case is used in a similar sense to the term lenjang, referring to that which is both slim and beautifully full. It should be noted, however, that although the buhun classification has been proposed, this conclusion, again, does not match the list. Thus, according to table 6.1 Raja Dénok (No. 100) does not belong to the buhun landraces, and Gajah Bairah (No. 59) should not be found in a huma field. Although at the end of the day no name was agreed upon everybody still looked happy when they left, leaving the differences between them unresolved. This was not considered to be a matter of any particular significance.

Cicemet is located at an elevation of about 1000 meters above sea level at a distance of about nine kilometers from Ciptarasa, the village where Mang Kokon lives. For local people from Cicemet to make this journey involves an average of about two and a half hours walk through the forest to reach Ciptarasa, which is at an elevation of 750 meters above sea level. Cianghangsa is located about five kilometers or one and a half hours walk to the northwest of Ciptarasa, but is positioned at approximately the same elevation.

6.3 The social character of rice landrace selection

Kasepuhan attempt to organise their agricultural activities so that they are undertaken in unison. Kasepuhan farmers describe the planting and harvesting seasons as those moments in the agricultural calender when their labour is concentrated in certain places for short periods of time. At such moments, they have to race against both calendrical time and the weather. They must, therefore, work efficiently and rapidly. Working together on one plot, and then moving to another, is considered more efficient than working individually on several plots simultaneously. When working in a pleasant atmosphere, full of small-talk and joking, kacapé (tiredness) is felt less, which enables people to work quicker. This is considered an important advantage of kepakan, as well as those factors mentioned above which also allow farmers to divide their labour more efficiently. The flexible working regime allows them to move from rice panicle to rice panicle in accordance with the pattern of ripening. Again, the use of the finger knife enables farmers to select which rice panicles are mature enough to be cut, so that while waiting for their own less mature rice individuals are in a position to help others, who will, when the time comes to harvest their own plot, help them in return. There will be no labour wastage. It is also said that having kepakan ensures the security of a household's rice supply by reducing dependence on their own land. Kasepuhan say 'tetempoan lain jang kahareup', 'we have another source to look into for the future'. It also presents an opportunity for a household to plant landraces which are not specifically aligned with their own household affinity. This they describe as ngilu ka batur 'joining another affinity'. This also applies to derepan which provides an opportunity to own a landrace which originally a person had no interest in, does not have an affinity for, or when his **kepakan** has failed. 6

Kasepuhan manage their farming interests through locating rice plants in diverse areas, increasing the flexibility, continuity and mobility of the worker, spreading the responsibility of decision-making amongst several households, and distributing rice landraces more widely between households, within and between kin relations. Kasepuhan sharing and exchanging of resources as a technique for reducing risk is perhaps close to what Scott

⁶ This kind of sharing may have the effects of what Geertz (1956b:141) calls 'shared poverty', in that dividing labour into numerous reciprocal arrangements reduces potential productivity, reduces output to a common, more equitable, level and shares risk. However, in the Kasepuhan case I prefer to use the term 'limit' rather than 'poverty' as people are dealing with limitations which do not reduce output to levels which would be regarded by them as 'poverty'.

(1976:15-26) calls, borrowing from Roumasset, a 'safety first' principle, whereby people minimise the probability of disaster rather than maximising their returns.⁷

The working regime, however, is not restricted to only the **matuh-batur** relationship. **Liliuran** and **ngahiras** are other working arrangements. **Liliuran** refers to a simple reciprocal exchange of labour which is not bound by the **matuh-batur** relationship, while **ngahiras** refers to work without any socially enforced demand for return or exchange, e.g. working on **adat** land or on the private land of the Sesepuh Girang, when labourers may only receive meals and cigarettes. ⁸

Kasepuhan decision making processes and their management of risk, as these are reflected in rice landrace selection through the kepakan, are typified by sentiments and practices of sharing and exchanging risk. This has an impact in terms of our understanding of Kasepuhan notions of morality, and with regard to matters of production and the diversity of rice. Many studies have discussed the shift in Indonesia from symmetrical and reciprocal forms of labour exchange to more asymmetrical and exploitative relations (e.g. Wertheim 1964, Jay 1969, Collier 1981, Kikuchi 1980). For example, Collier and Kikuchi et al regard the pre-harvesting labour arrangement, what they call ngepak-ngedok, and ceblokan (where labour owns a particular part of the plot), as significant in that the sense of sharing and mutual help among the farmers is reduced to a minimum. By contrast, at the time when ngepak-ngedok dissappeared, as mentioned by Collier, and when bawon became more prevalent, as argued by Kikuchi, it provided a more open labour arrangement in that each harvester had an equal chance to work and obtain the yield at the harvesting stage. Both of them might be right. The main point I would like to make is that these writers appear to look only at the surface level, without recognising how sharing and mutual help not only involve access and opportunity, and how equal this might be, but also how costs and benefits are cooperatively managed between farmers.

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⁷ Since this principle has been a fundamental part of household strategies to avoid falling below the minimum subsistence level for centuries it provides a basis for determining the expected variances for farmers. For Wharton (1971), this is a key reason behind farmer's resistance to adopting a new technology. See also Ortiz (1973) on this dynamic of uncertainty, and on degree of confidence in relation to peasant decision-making.

⁸ Working together through mutual cooperation/assistance is popularly discussed in Indonesia within the framework of gotong royong. Such collective work for community purposes, for example, **ngahiras** in the Kasepuhan case, should, however, be differentiated from 'real' reciprocal benefits. The obligation to join is primarily regulated by <u>adat</u>, and is not a case of having received a favour which has to be returned, or the expectancy of a favour in return for what has been done.

Kasepuhan ethnography clearly shows that there is no homogenous pattern to their community. Kasepuhan community cannot be adequately described in fixed, general, terms. Whilst there are general rules which can be applied to the whole of the community there is likewise significant variation. Each individual (and individual household) - e.g. in the case of rice affinity (katurutan) - can and do make their best way in terms of individually cost-effective conduct while aware of the general rules. The strategy is certainty constrained by what can be accepted and what cannot be accepted according to their cultural frame of reference, but through their understanding of this framework individual negotiations and arrangements can be made. Social organisation of kepakan has been made avalaible by Kasepuhan to provide individual households with allowances for managing both internally and externally induced risks. Kasepuhan do measure – and anticipate – possible risk collectively but make allowances and choices as to how to deal with the course of alam separately.

The Kasepuhan case highlight the differences between the idea of mastery over nature in which humans feel that they have the power to control nature, reducing or even eliminating the risks if possible through the application of advanced technology, and those communities who feel they have less power to control nature. In the first, the solutions are a-social (that is, they are assumed to be independent of social norms and practices), while in the second the solutions are social, embedded in a particular shared morality and distributed through particular social relations. Kasepuhan understand the risks posed by particular ecological conditions and calculate the probability of failure on the basis of social relations. The sharing of risk is employed in terms of crop and household diversity, and is cosmologically legitimated through an understanding that **alam** is neither static nor capricious but proceeds cyclically in accordance with **sajarah**, pre-destined cycle. Kasepuhan accept the flow of **alam**. But **alam** is tolerant as long as it is within its **sajarah**. Thus Kasepuhan represents a case of 'managing to the limit'.

Although exposed to modern market forces and embodying some hard-headed 'formalist' notions of economic rationality, Kasepuhan economy can ultimately only be understood substantively. Despite Polanyi's (1946:53) argument that an 'economic system will be run on non–economic motives' it is economic motives which drive Kasepuhan to get into social relationships, and although these are not explicitly expressed in social rules, they are nevertheless strongly implied. This economic rationale is hidden from, and lies beyond,

the superficial and casual observation of most outsiders. Moreover, although from the perspective of Nash and Ehrenfeld (1997) it can be argued that Kasepuhan practice is an example par exellence of the operation of an environmental management by 'self-regulation' which is now increasingly being superseded by a 'command and control' system, Kasepuhan crop diversity and fallow practices are not the result of any 'command' by the Sesepuh Girang alone, and neither is the non-use of pesticides. Rather the decisions emerge through mutual consultation and understanding of more general custom. Future planting strategies can be said to be the result of Karuhun messages, but the senior rank elders and village elders, and ordinary members are freely able to discuss these issues between them. Kasepuhan approaches, therefore, contrast with the policy experienced by the broader Indonesia nation, at least for 32 years under the New Order rules, where environmental management was theoretically based on the central command-and-control principle that required, accordingly, a centralised law enforcement apparatus.

6.4 Social and economic change

The main social dynamic underlying the agricultural strategy of most Kasepuhan is what Sahlins (1974) calls the domestic mode of production, in which producers seek to produce only what they need to feed their immediate family and fulfill other social obligations. There is no over-riding compulsion to produce for market exchange. General observations show that if the need for consumption increases, but land is in short supply, which in turn constrains production, an imbalance would be the result. With population growth, in many cases also combined with low land availability and environmental degradation, labour as a production factor would exceed land as the primary resource for intensification. Under such conditions a mode of production based on domestic social relations alone may lose its meaning (Weber 1947, Seddon and Copans 1978, Worsley 1982: 41-44).

There is little evidence of this kind of transition in the recent history of Kasepuhan, where, since 1988, some members of the community have preferred to be paid in money. For **sawah** work, particularly, a standard rate has been established. In 1998 the wage for **sawah** tillage was 12,500 rupiah, plus meals and cigarettes, which would add up to about 15,000 rupiah per-person/day. For a plot of land 400 square meters, which is the average amount of land owned, the work force, consisting of one buffalo, three workers plus one

landowner, would need three days to complete the work. Therefore, the total cost would be 135,000 rupiah. The work include **ngabajak**, ploughing, that is the initial work to break and turn the soil to a depth of 15-20 cm using a wooden or light iron plough drawn by one or two buffalo, preferably when there is about 10 cm of water on the land, and ngagaru, harrowing, in which big clods of soil are broken and puddled with water, and nganglér, leveling the soil. It was usual that farmers work from seven in the morning until pecad sawed, about ten to eleven o'clock, a time when the day is considered too hot for buffaloes. In the four or five years before 1998 the wage paid was usually associated with the value of bawon. For example, for one day worked each labourer would receive the equivalent of six pocong bawon, which at that time amounted to 800 rupiah per pocong. Therefore, each worker would receive 4,800 rupiah per day. Whilst paid work is admitted by some Kasepuhan to be limited only to sawah, there is evidence that some paid workers are to be found hoeing huma. These workers received 5,000 rupiah for one day's work, from seven in the morning to three in the afternoon. By looking at both sawah and huma hours of work, it appears that capital possessions i.e. tools and buffalo will make a big difference as to what is perceived as being more valuable, capital possessions placing a person in a better bargain position. Hiring sawah workers, however, has not become common among the Kasepuhan; it generally only takes place if there is work outside agriculture which is perceived as an alternative worth taking. As Mang Kokon needs to manage his labour between guiding guests and farming, and given that he has to achieve a simultaneous harvest with other households, recruiting other workers and buffalo is a means to catching-up or reaching common planting targets.

Cash earnings are said by some to be more profitable, as money provides an immediate means of purchasing supplies, including rice, and other needs, without having to face the risk of crop failure. Agricultural workers thus give a higher priority to the more immediate context of gains and losses. Though wage workers have thus so far become involved only in the preparation of fields, some have regretted the situation which places an increasing emphasis on monetary value. Many do not agree with this change because the situation would become increasingly difficult if everyone wanted a cash payment. These concerns are indicated by the Kasepuhan rule refusing selling of snacks made from **béas** (pounded rice) despite receiving offers from city people to pay for them.

There is some evidence to suggest that with the development of paid labour the matuh-batur relationship is disappearing, including that for kepakan. Whilst labourers receive an immediate cash wage the whole future risk of crop failure is borne by the landowner alone. Landowners adopt several strategies in order to help cover the costs incurred by wage labour and to safeguard against future misfortune. As at the present time the benefit has to be released to others, the possible future cost will be minimised. The landowner may only plant rice which will ensure him a good return or may refuse to try to use a new landrace. One Kasepuhan elder told me that he preferred to plant tested, quick growing, high yielding landraces and landraces that were easy to be harvested, as well as working one permanent site in order to maintain continuity from year to year. From the workers point of view, without the kepakan, and in the situation where there is no money payment, they are stimulated to obtain as much bawon as possible (that is to prioritise working on an easily harvested rice).

Chapter five (p. 141-142) showed how **sawah** offers many advantages over **huma** and that this view is increasingly accepted by Kasepuhan. Table 6.1a provides statistics on some Kasepuhan landraces (adapted from table 6.1.) and shows the total number of landraces suitable for **sawah** as more than three times that for **huma** (111 as opposed to 34). However, as there was evidence of some un-matched names between table 6.1. with table 6.2. (see p. 164) a further study of this matter is needed.

Table 6.1a Statistic of Kasepuhan Landraces (Adapted from table 6.1, Budi 1977)

		Landraces		
	Ancient (buhun)	Common (biasa)	Glutinous (ketan)	Total
	26	101	19	146
Type of field				
Wet (sawah) Dry (huma) Wet and dry	13 13	85 15 1	13 6	111 34 1

		Landraces	Landraces		
	Ancient (buhun)	Common (biasa)	Glutinous (ketan)	Total	
Elevation					
Low (are) Low and medium	2 13	10 58	12	12 83	
Low, medium and high Low and high	1	17	6	23 1	
Medium (sedengan) Medium and high	4 1	3 8	1	7 10	
High (leuir)	5	5		10	
Type of field and elevation					
Wet - low Wet - low -medium Wet - low -medium - high	1 9	8 55 13	7 5	9 71` 18	
Wet - medium Wet - medium - high Wet - high	1 1	1 7 2	1	2 9 2	
Dry - low Dry - low - medium Dry - low - high Dry - low - medium - high	1 4 1	2 4 3	5	3 13 1 3	
Dry - medium Dry - high	3 5	2 3		5 8	
Wet - dry - low - medium - high		1	1	2	

Landraces

Whilst the further development of **sawah** is increasingly correlated only with a desire to maximise production, and to confine work to a single household, traditional household cooperation is discouraged. It is likely that the notions of sharing which characterise traditional Kasepuhan agricultural risk management may change, leading to less dependence on the use of local social and economical relations of cooperation. Such relations of cooperation become necessarily incorporated within a much larger and more standardised network of owner-worker relations. The good or bad yields, therefore, can be, and are claimed to be the result of a single household strategy. Further, if success is calculated only

on the basis of the total yields, the wife's role in **nganyaran**, tasting new yield rice, is likely to become less significant.

The absorption of the ideology of production maximisation with respect to rice seems, however, to be constrained by the difficulty of marketing **paré** (unpounded rice), while it is prohibited by Kasepuhan law and regulations to exchange **béas** (pounded rice) for money. Since the price of Kasepuhan pre-pounded rice is low and it is unlikely to be accepted by non-Kasepuhan, the opportunities of using rice as a trading commodity are minimal. The option available to Kasepuhan are, therefore, influenced, though inadvertently, by the limited market of rice. The effect has been to minimise the risk of lack of rice for the Kasepuhan community itself, and it may, in return, reduce the pressure for land expansion and intensification.⁹

Those Kasepuhan production resources which have become the basis for an internal exchange, and which could in the future become a means of obtaining a monetary income are, mostly, **huma** and **sawah** (dry and wet rice land), **kebon** (gardens), and **talun** (orchards). INRIK and LEAD have listed the various crops in Kasepuhan **talun** (orchards) and **kebon** (gardens) for Ciptarasa in 1995 (appendix 1 and 2). Some Kasepuhan **sawah** agriculture also incorporates fish farming, known as <u>mina-padi</u> in government circles. Other cash income comes from making agricultural tools and cooking utensils, crafts which have long been practiced.

Undeniably, Kasepuhan increasingly re-define their basic needs beyond just rice. Advertisements using sophisticated methods, and the Sesepuh Girang's use of a handphone, motorcycle and car, and other goods of modern life, further promote material wishes and needs. Likewise, people increasingly prefer to smoke branded cigarettes such as 'Jarum' and to use purchased shampoos such as 'Sunsilk' or soap of various brands. There are Kasepuhan who expect and willingly accept money benefits. It is now acceptable for people, in particular those living in Kampung Gedé Ciptarasa, to receive money as a payment. Guests, in this context, are usually regarded as bringing money benefits. A house which accommodates guests is now often seen by others as a source of money, rumours or jealousy language. In many cases, whenever guests or their host family ask for privileges, although it

⁹ Earlier studies of Kenyah-Dayaks at Long Segar undertaken by Vayda (1981) have shown that people are encouraged to cut primary forest increasingly for ladang because of they are able to market surplus rice.

¹⁰ Mina-padi first developed in West Java, and has been practiced for about 20-30 years. It is now included in the programme for fishery development of the Department of Fishery.

is not explicitly said, people fear it might be considered **ngérakeun** (shameful) if they expect money in return. This trend has become a cause for concern for some elders. Mang Anda, **panyadap** (a tapper), felt very sad when his guest offered him some money to return his **lahang** (palm sugar sap). His hospitality, he maintained, could not be priced in terms of money, the offer of which at this level was considered **kasar** (rude). Speaking about money during meals is generally **pamali** (forbidden), for example.

Some Kasepuhan, however, could not help admitting the fact that having some money gave them a greater sense of security. Saving has been a Kasepuhan concern for a long time. The entrusted forest and the Si Jimat rice barn, for example, is saved and acts as an insurance for the life of the community in the future, as does the stocked rice in each individual barn. Money also enables them to collect and use the new benefits, and if they **nguteuk** (think carefully enough), they can cover future misfortunes or **apes** (costs). However, since the needs are beyond subsistence and they are not available locally, the savings should be in terms of what can be accepted in a larger environment e.g. in city. Money saving would make a big difference. In this context, therefore, money is perceived as being more reliable and consistent with the change of interests and alternatives that emerge and become available.

Since school, health services, electricity, agricultural inputs (such as synthetic fertilizers), and daily needs (such as salt, cooking oil, and kerosene) all need to be paid for with money, Kasepuhan dependence on the money economy is continuously growing. There are Kasepuhan who have already been participating in the market for a long time, such as through palm sugar production. But the majority of the Kasepuhan are in the process of increasingly re-defining their source of livelihood in monetary terms. One opportunity they can see is to try to engage in a wider market beyond local 'person to person' exchanges, perhaps, by selling to the cities palm sugar, **curuluk** (produced from the *Arenga* palm), bananas, chillies, beans and garden products from their gardens, **kebon** or **talun**. A few have already etablished the connection with a larger market. High prices, due to the economic crisis, are seen by some Kasepuhan as an irresistible opportunity.

But, except for the palm sugar trade which can be considered stable enough, marketing these commodities means depending on middlemen, **tangkulak**. The middlemen visit erratically and are dependent on the weather, as most Kasepuhan villages are some distance from the market and without any asphalt road facility. By the end of 1998, one

tandan (bunch) of bananas still on the plant was bought by middlemen for 5,000 rupiah. But by the middle of 1999 supply of bananas to the market was so high that the bananas had become worthless. Few middlemen could afford to go to the Kasepuhan area. Many bananas were destroyed. Some Kasepuhan tried to make snacks from the surplus of bananas but, as middlemen pointed out, they were not in a competitive condition compared to products from other regions. Competing quality, appearance and price seem to be the most important obstacles preventing local people from marketing their products. Other kinds of snacks they are skilled at making, mostly, cannot be traded as they are made from pounded rice. In the middle of 1999 because there was news (on television and radio) that the price of Capsicum sp. was very high, i.e. 35,000 rupiah per kilogram, many Kasepuhan planted it in their fallow huma land, and some were extended to a time when ngahuma must be performed. Unfortunately, when it was ready to be harvested the price had sharply dropped. Again, Kasepuhan's Capsicum sp. remained un-marketed. Many Kasepuhan recognise the fluctuation of commodity prices during the crisis. However, if the information is minimal while the experience is limited they are incapable of calculating and predicting the risks. Mang Absor had tried once to trade peanut. Because the price was considered good he had sold all of it to middlemen, forgetting to keep some for seed. He wanted to try it again but had to wait until he had the money to buy peanut seed.

Initial expectations among Kasepuhan had been that engaging in a wider market would bring significant benefits, but, at a later stage, it became clear that there were also problems. During 1995 the palm sugar stock, for example, completely ran out locally. In normal times middlemen stocked locally made palm sugar, which they took to the nearest town, Palabuanratu. Consequently, rather than buy first-hand, at the cost 2,000 rupiah for sakojor¹¹, local Kasepuhan had to buy from a warung (kiosk), which cost 6,000 rupiah. A earlier experience had been when several Kasepuhan had been involved in trading clove, an essential raw material for the production of the kretek (clove) cigarettes which are very popular with Indonesians. By the 1990s the clove market, nationally, was good, but then the price fell dramatically. This was due to the creation in late 1990 the BPPC (Badan Penyangga dan Pemasaran Cengkeh, Clove Marketing Board), a private consortium managed by Tommy Soeharto, the President's youngest son, and which was given the monopoly right to purchase

¹¹ A **sakojor** consists of ten **gandu** (cubes); one **gandu** being approximately measured at about one third of the internode of the bamboo *Gigantochloa pseudo-arundinacea*.

and distribute cloves (Parker 1991). The results of this episode are still evident around Kasepuhan area, with many of the clove trees now left unattended.

An alternative strategy is to work in handicrafts and to extend the network that way. There are three people of middle age who have for a long time provided craft necessities for people around Ciptarasa. One makes agricultural tools while the other two make: kanéron, a shoulder bag made of rattan which is used everyday by most Kasepuhan men, kitchen untensils (such as boboko, aseupan, hihid), things which are used when they are in field, such as dudukuy (a wide hat to protect the neck and face from sunburn) and tolok (a small bucket for loose rice). They now also make some merchandise for tourists, such as decorated golok (machetes), and house and barn miniatures. But the demand is occasional. The time available is also limited. They work usually in order to fill the gap between agricultural activities. If the demand is guaranteed to be continuous Mang Oo would consider working full time in handicrafts, and leave his agricultural land to his son. Another possibility was to be involved with city businesses such as training as tourist guides. But, as they say, to do this would need a lot of courage, kawani. The feeling of reluctance and shyness, isin, seems to be another reason that prevents local people from being involved with city people.

Not only are local Kasepuhan values changing in order to deal with outsiders but some Kasepuhan luar have moved out of agriculture altogether, and into entrepreneurial activity elsewhere. Some have even established trading firms in Jakarta, Bandung and Lampung with assets of some billions of rupiah. But, unfortunately, when the economic crisis hit the country in 1998, they became bankrupt and had to be bailed out by the Sesepuh Girang. Here we see that the bond between those entrepreneurs who have emigrated and the community, especially Sesepuh Girang, are being maintained, which is also clear from the fact that these outmigrants return to Kasepuhan for ponggokan and serah taun ceremonies. This willingness to migrate is also a force to be reckoned with in the transformation of the Kasepuhan community. As in other parts of Java, outmigration has become a source of income, enchancing the development process by funding, say, better health and educational services.

The consequences of economic change are reflected in other parts of the Kasepuhan socio-cultural system. Traditionally, Kasepuhan recognise social groups called **jelema gedé**, **cukupan** and **leutik** (literally, **jelema** = person, **gedé** = big, **cukupan** = middle, **leutik** = small), based on the land area which people own, and which in turn reflects not only their

level of prosperity in terms of the number and size of **leuit** (rice barns) people own, but personal qualities as well, such as wisdom. Since 1997-1998 there has been a boom in gold mining but to be involved in gold mining requires a physically strong body. So, though some people have become wealthy overnight, these tend to be limited to the younger. Such people are described as **jelema beunghar** (rich people). Although a 'rich person' was traditionally considered to be different from a 'big person', they are now sometimes described in the same way. We can see here a shift in values from big person, associated with rice barns and traditional wisdom, to big/rich person, associated with money. Though there is now, for some, a possibility of maximising production, since surplus of rice will only have the effect of raising the prestige of the owner, the interest in working as a farmer as a main occupation is becoming less attractive, in particular for a younger generation who prefer to own other material things such as motorcycles, good houses, etc.

The division of labour by gender has also been affected. In former times it was not acceptable for women to work on preparing land for rice planting e.g. nyacar, clearing the land. For women it was only considered appropriate to work during planting, weeding and harvesting. During my fieldwork in 1998-1999, there were two households where the wife also worked on preparing land, Mang Utar and Mang Absor. Mang Utar had been engaged full time as a mining security officer, whilst Mang Absor was a tourist guide. Since then both wives have been forced to work, Mang Utar for two successive years, and Mang Absor for three years. This case, of women preparing land, however, was still considered odd and it was being gossiped among the village members that it was an inapproriate way for women to behave. The husband has been described as bangkawarah, deviating from the teachings that should be followed by Kasepuhan. It is frequently assumed among the warga that the opportunity to work outside agriculture is more open to men, especially younger men. The work available for women, again especially younger women, usually obliges them to move out from the village e.g. as domestic servants in the city (Ind. pembantu rumah tanga). If this development continues, it can be expected that only older men and women, and young children, will be left to work on agricultural land.

Although new economic activities of this kind attract people, there are Kasepuhan who regret the trend, especially among the youth, as there is little time to learn the **élmu buhun** (the old knowledge) and to share the experiences of daily practical life. This concern was well expressed by one of the Baris Kolot Indung when he said to me that:

'in the future the **élmu buhun** that we have will be in the city people, as our young generation does not want to do, learn and listen to the older generation, while many people from the cities are coming to learn our knowledge'

6.5 Conclusion

Through this example we can see that Kasepuhan subsistence practices operate flexibly, often permitting – in this case – a re-interpretation of the combination of landraces thought appropriate for particular conditions, even though decisions are made within a framework of unchanging cosmological referents and in accordance with beliefs about supernatural guidance. Kasepuhan practice contradicts older, less informed, characterisations of traditional technical knowledge as fixed and mechanistic.

It is clear that the organisation of Kasepuhan agriculture is both participatory and flexible, allowing for feedback through rational decision-making processes based on the observations and judgement of individual households. The landraces planted vary over time and space, with strategies evolving on the basis of comparative data on the performance of the various landraces. As new landraces are discovered their characteristics are discussed and compared. New landraces are given official validation at the **ponggokan**. Unlike the nearby Baduy (Iskandar 1998), Kasepuhan are willing to accept new landraces, including those from outside, but they are always critical and first scrutinise their properties experimentally, such as in the HYV evaluation process which I will describe in chapter seven.

Chapter Seven

Case Studies of Kasepuhan Risk Perception and Management

Since the work of Mary Douglas and others cultural and sociological studies of pollution have been linked to the notion of 'matter out of order', or 'out of place' (e.g. Douglas 1966, Valeri 2000). The concept of pollution has its origin in symbolic classifications which seek to keep separate, for example, that which is sacred from that which is profane. The pollution arises when attempts are made to combine the two, particularly violating or contaminating sacred or pure space or substance with what is regarded as profane. The outcome of such contact is universally regarded as inviting danger, and therefore constituting a risk. Risk aversion behaviour in such contexts requires the separation of things belonging to the two categories. With the rise of industrialism, and in its wake of the environmental movement, the concept of pollution came to be understood in a more technical, scientifically-informed sense: thus nuclear radioactivity, high levels of pathogens in domestic water supply or atmospheric lead levels due to hydrocarbon exhausts were all regarded as 'pollutants' because they could be empirically demonstrated to endanger health. Of course, the symbolic and aesthetic connotations of pollution have continued, and it is the link between the symbolic and the technical which gives much discourse concerning pollution its moral force.

In modern Indonesia pollution in this latter sense is termed pengotoran or polusi (borrowing the English term), and the same conflation between technical and symbolic senses described above also exists. Although present-day Kasepuhan do not confuse these two senses, the introduction of new kinds of pollutants, together with a technical discourse on 'pollution' emanating from government, media and NGO sources has challenged the boundaries between them. Thus, the Kasepuhan talk about risks relating to these new kind of pollutants in the same way, for example, as they talk about pollution brought about by other 'kotor' (dirty) things, for example, connected with kareseban, female menstruation. During her monthly period a women is not allowed to participate in making food for salametan, as the food for the Karuhun must be beresih, 'clean'. Emak (the wife of Sesepuh Girang) had to move out and was not allowed to live in Sesepuh Girang's private house until she was 'clean' when the blood had stopped. The reason for this was that the Sesepuh Girang's private house is the storage place for many Kasepuhan sacred heirlooms. Other ritual activities also prohibit the participation of

'dirty' women, for example, the ritual for initiating rice planting, **ngaseuk**, and the ritual for tasting new rice, **nganyaran**.

This chapter examines how Kasepuhan have responded to new risks of pollution posed by: forest fire and climate change, mercury poisoning, gold mining tunnel collapse, garbage and smoke pollution, and high yielding varieties of rice, 'crop pest infestation' and crop failure, and biodiversity loss. Each of the cases examined reflect different aspects as to how Kasepuhan conceive the natural world and perceive natural hazards, and highlight to differing degrees how people use the framework provided by traditional cosmology to cope with risk, at times accommodating those risks whilst at other times modifying their existing explanatory framework. Again, different cases raise different kinds of issue in relation to risk perception and management. 1997/8 was an El Niño year, during which some parts of Indonesia experienced large forest fires throughout the dry season, though in the Kasepuhan area knowledge of this was almost entirely confined to media reports and rumour. Large scale gold-mining is an entirely new development, since 1995. Pollution of domestic space through smoke and refuse is an old problem, but with new dimensions. During my fieldwork (1998/99) there were crop pests but no major epidemics. New rice varieties had been first introduced into the area in the 1970s. Some of these categories of risk, therefore, are self-evident to the Kasepuhan and based on prior experience (e.g. crop pests), others are self-evident but require some understanding as to the risk involved (e.g. forest fire), and others still only become significant categories of risk because external agencies present them as such, even though for the Kasepuhan themselves their own experience provides little data (e.g. mercury poisoning, biodiversity loss). Biodiversity loss is only an issue for Kasepuhan because it is related to the newly important income generating area of eco-tourism and biodiversity research.

7.1 Forest fires and climate change

In many parts of the world fires are important phenomena which play a central role in maintaining the character, biodiversity and productivity of several kinds of ecosystem. The accumulated effects of anthropogenic and climatic conditions, however, may result in increased risk of unwanted and catastrophic fires.

In 1982 Indonesia suffered its first big forest fire in Kalimantan when about 3.5 million hectares of tropical forest was burned which stunned the world, because people did not expect that a humid tropical forest could burn so extensively. Since then

Indonesia has suffered from recurrent forest fires every dry season, particularly in the El Niño years. The drought in the dry seasons is of course a factor, but no less important is the destruction of forests in large areas which removes or damages the forest canopies and subsequently facilitates the development of undergrowth. This undergrowth of shrubs and grasses, particularly the *Imperata cylindrica*, becomes very combustable material in the dry season. In logging areas remnants of logging are also left behind which supply additional fuel for the fires. There are indications that the problem of forest fires are progressively becoming more serious with time. For example, the rainfall in the El Niño year of 1991 was lower than in the El Niño year of 1994, and this latter one lower than in 1997, but the forest fire was the most serious in 1997, while the fire of 1991 the least serious. The reasons could be that more forests are progressively more damaged, making them more susceptible to fire and more people are clearing forests by fire.

The 1997/8 fires reported occurred in Sumatra, Kalimantan, Sulawesi and Irian Jaya (now Papua) – and in other areas too but on a smaller scale - aggravated by the drought due to the El Niño Southern Oscillation. The smoke-haze over the region extended to the neighbouring countries of Brunei, Malaysia and Singapore. The effects were considered very severe - Malaysia declared a state of emergency in Sarawak, and Singapore recorded its worst ever air pollution – which forced ASEAN to call for international help to fight the fires. The biomass gasses released from the burnt forests, grasslands and agricultural lands not only represented a major contributor to global warming but also reacted with other atmospheric products to form ozone. From the foresters' point of view it is forest loss which became their concern but politicians and economists also saw this as an event with many consequences for business, and with increased health costs.

There was no smoke-haze problem in the Kasepuhan area. The prevailing winds were primarily from the Australian continent to the Asiatic landmass, therefore, Java did not suffer from the smoke to which these fires gave rise. During my fieldwork in 1998/9, however, many Kasepuhan were still talking about the 1997/8 usum halodo (drought season) or bulan katiga. The drought season generally is not regarded as harmful by Kasepuhan, as this is only an usum which comes regularly. Kasepuhan easily remember that the 1997/8 drought was distinctively panas 'hot', perceived as exceptionally dry and long, lasting for almost the entire usum tanam (agricultural season) of 1997 and continuing until the next season of 1998. With no rain there were water shortages and the soil cracked. The rice yields were considered well below the average. Though Si

Jimat's reserve rice was only used by a very small number of households there was a high circulation of rice, in the context of **siling bantu** (mutual aid), between members of the **warga** community. If the drought had been determined by **sajarah** then it would not have been regarded as **bancana** (misfortune) as this was not **gara-gara**, not someone's fault i.e. not an anthropogenic event. The question which Kasepuhan had to come to terms with was how to reconcile these two modes of explanation.

There were Kasepuhan who believed that the panas was caused by forest fires though there were no forest fires in the Kasepuhan area during the 1997/8 El Niño. They heard a lot concerning large forest fires from radio, television and newspapers. The news media had reported that in 1997/8 the weather had been very dry and that as a result of large-scale deforestation over the previous decades Eurih, Imperata grass, and bush scrub had provided ideal conditions for fire to rapidly establish itself and spread. It was also widely reported that fires had often ignited when people were using fire to clear forest vegetation for swiddens and plantations. Kasepuhan, however, could not understand how forest fires could occur because of just clearing a small area of the forest. In trying to explain why fires occurred in other places and not in the Kasepuhan area, it was suggested that perhaps it was because there people practiced different methods to those used by the Kasepuhan. We can note here, of course, that the Indonesian media, land-owners and government sources tended to blame small-scale swidden cultivators, when most of the damage appears to have been caused by largescale clearing for plantation crops, logging, and sometimes quite deliberately (see e.g. Ellen and Watson 1997).²

Access to media reports (e.g. television) and involvement with researchers and visitors familiarised particular Kasepuhan with terms such as <u>angin panas</u>, El Niño and <u>pemanasan bumi</u> (global warming). The **panas** effects were understandable in the

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¹ In the middle 1970s the Ministry of Information had started the national programme called <u>koran masuk desa</u> (newspapers enter the village) and <u>kelompencapir</u> (<u>kelompok pendengar, pembaca dan pemirsa</u> (listening, reading and viewing groups)) to disseminate information to villages. See Soemardjan and Breazeale 1993: 29-41.

² Indeed, Government ministers and local officials have for a long time scapegoated shifting cultivators, and ignored the destructive practices of large, politically well-connected logging companies. But during the 1997/8 fires, in response to international pressures, and perhaps, coupled with the turmoil of the current Indonesian political and economic situation, some Indonesian government ministers were officially acknowledging that a large part of the blame should be placed on large plantation and logging companies, and transmigration contractors. It is generally believed that the fires are strongly linked with deforestation, although other factors should also be taken into consideration, such as arson resulting from emerging conflict in the areas. See: Down to Earth 1997, Vayda 1999, CIFOR et al 1998, Tomich et al 1998, Wakker 1999, Potter and Lee 1999, Schweithelm 1999, Applegate et al 2002, Colfer 2002 for the costs and the debates relating to the underlying causes of fires. For the official representation of forest fires see Laporan Kebakaran Hutan dan Lahan di Indonesia by Kantor Menteri Negara Lingkungan Hidup, 1998.

Kasepuhan context of **usum**, as **usum panas** deviates from **sajarah**. For Kasepuhan **panas** goes beyond literally meaning 'hot', it has a spiritual meaning of unrest (in the middle world). They listened to reports and made their own observations, and found it difficult to believe that people somewhere had collectively done something wrong and had to be blamed for causing the **alam** to become **panas**. The **panas** in the middle world is seen to **ngahebos** (lit. heat up) the upper world, inform the **batara-batari** in the upper world of the inability of humans in the middle world to **pancer** between the upper and the lower worlds. This is not a good situation for the human. This opinion was encouraged by Sesepuh Girang who explains that the cause of the problem is improper human **kaéling**. Thus **alam sangara** needs to run for eight years (**sawindu**) to 'clear-up' the middle world from humans who do not have **kaéling**.

According to several Kasepuhan, while the felling and burning of trees is acceptable, the occurrence of the fires over large areas of the forest is unacceptable. Blame should not be attributed to the practice itself but rather to individual actors. A solution to the problem is not obtained by preventing the behaviour from occurring, such as through forbidding people to clear the forest and to plant rice, but by looking at the **kaéling** of a particular actor.

The forest fire discourse had an impact on the Kasepuhan since they employed swidden clearing practices which resembled those imputed to be the cause of fires elsewhere, on quite separate islands, even though the reports in the media claiming such causes had been greatly exaggerated, and despite the fact that there had been no fires at all in the Kasepuhan area. Moreover, since the media reports linked the drought and the fires, Kasepuhan, rather than attributing both to a common cause, the El Niño, saw a causal relationship between their drought and fires elsewhere. They thus described it in terms of how 'the curse also has an impact on us; while other people cause the fire we have to suffer a long drought'. This is consistent with other Kasepuhan exegeses in which the cause of natural disaster is attributed to human kaéling, and in which such disasters are seen not to be consistent with sajarah. The long drought which was associated with El Niño was not considered a natural event, but an anthropogenic one. It is apparent that Kasepuhan live with and work through the consequences of environmental change, for example during times of drought, in culturally consistent and recogniseable ways.

7.2 Gold mining and mercury poisoning

Since the early nineteen-sixties local people in the Mount Halimun area, including Kasepuhan, have mined the gold deposits which are found in the Cibanteng area, Kabupaten Bogor. The gold so obtained was used for making personal jewelry, and was mined in insufficient quantities to make it worthwhile as a regular source of income. With the opening up of the Cikotok area (Kecamatan Cisolok, Kabupaten Bogor) in 1936 for gold mining by the state, however, the situation changed. By 1968 local communities were starting to get involved in gold mining on a larger scale. Some provided labour at PT ANTAM, the state owned company, but some worked for private mining initiatives, widely known by the acronym PETI (Ind. Pertambangan Emas Tanpa Ijin, gold mining without a permit). Most of the labour involved at PT ANTAM was derived from workers from outside the kabupaten, for example from Jakarta and Banten areas. Since 1985 the PETI activities have greatly increased. In 1995 there were about four locations of PETI which covered an area of approximately 31 ha, in 1997 10 locations of 50 ha, in 1998 13 locations of 53 ha, and in 2002 21 locations of 59.8 ha (Susmianto 1999, BTNGH 2002, see appendix 7.1). The Cepu, Longsoran, Cisuren and Ciurug (PERHUTANI), called Blok Pongkor, are the most popular, and since 1997 this area, which like Cikotok, is located in Bogor, but in the sub-district of Nanggung, has emerged as the new focus for gold mining. In 2000 PUSARPEDAL-BAPEDAL identified about 300 gelundung (a barrel for extracting gold from amalgam) operated by 1000 PETI who could earn three grams of gold from just one spin of a gelundung. A higher figure is provided by Susmianto (1999) who notes that in 1999 there were 5000 PETI, 70% of which were non-native (including those coming from outside Java). Rumours suggested that, compared to other Halimun areas, Pongkor contained the most ore. Moreover, it was relatively easy to reach by public transport.

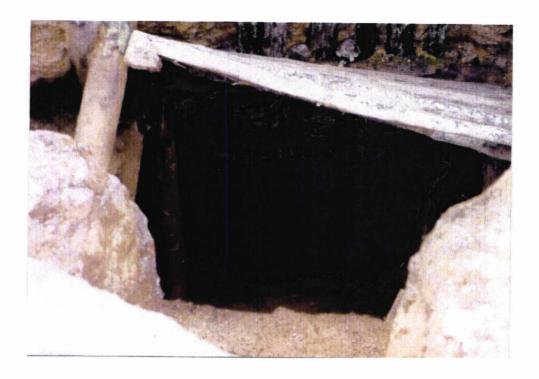
Permits to mine gold in the Halimun area are granted by government on the basis of a kontrak karya (leasehold) and kuasa pertambangan (a mining license). In practice, however, the acquisition of mining rights and rules is subject to patron-client relations and negotiations, or put more crudely KKN (kolusi, korupsi, nepotism), involving a particular desa, security (of the police, the ABRI and PT ANTAM), civil officers, and sometimes supported by the elders of the community.³ Not surprisingly, therefore, most

³ This issue has been recognised officially by the government (World Bank report, 2001) to exist in other Indonesian business activities (see e.g. McCarthy 2002, Kahn 1999). The businesses are exclusively run through a patron-client network, often well organized, well acknowledged, and well backed-up by the authorities but, strictly defined, they are not supported by the legal documents.

of the PETI in these areas perceived themselves as having legal 'permission' to mine. Local people recognise three types of mine ownership: the kind associated with PT ANTAM, the kind associated with officially recognised village cooperatives (Ind. koperasi unit desa, KUD) and those owned by pribumi, local individuals. The first two kinds of mine, and some of those owned by pribumi, are certified by state documentation. With a KUD contract, individual miners are expected to give half of what they mine to the KUD. In fact, in the absence of official documentation, it is really only the hole or tunnel which belongs to the individual, rather than the rights to extract gold. When an individual wishes to sell his 'mining rights' or when a valuation is required for some other purpose, the price is based on speculation regarding the quality and quantity of gold which it is likely to yield. In one case the price given was 12 million rupiah, which was regarded as reflecting an average yield.

Gold is relatively scarce in the earth, but it occurs in many different kinds of rock and in many different geological environments. Gold is concentrated by geological processes to form commercial deposits of two principal types: lode (primary), the primary target of prospector sought gold, and placer (secondary). Most PETI extraction is by placer deposit miners. A placer deposit, unlike a lode, is a surface deposit created through the processes of weathering and erosion that may be buried under rock debris. These 'fossil' placers are subsequently cemented into hard rocks. In order to search this deposit miners make a hole in the steep side of a hill, usually just large enough to take their own body (figure 7.1). Sometimes they need to dig further inside. A sack to collect the gold ore is dragged behind them. The number of underground tunnels is directly proportional to the number of individuals, so it can be seen that this mode of mining increases the likelihood of collapse, compared with operations which include more miners using the same tunnels. In addition, the location of gold ore is rarely predictable, and unsuccessful searches for mineable gold have the effect of increasing tunnel length and the associated dangers. Conflict between miners also arises when different tunnels meet, especially if they meet on or near a contour of gold ore, and as there are many underground tunnels the number of potential situations for conflict is great. There are no agreed rules of ownership with respect to tunnels. In general, the first person to dig a particular hole is considered as the owner of that hole. Hence, where one person finds a gold seam that person will stay there, his group guarding the tunnel and chasing away others.

Figure 7.1 A gold mining tunnel



In the context of a discussion of Kasepuhan risk perception and management, what is interesting about the technical processing of gold ore is the use of the gurundung (Ind. gelundung), a barrel amalgamator to extract gold. This is simply a horizontal cylinder made from an old metal asphalt drum, in which the slurry of finely ground ore and kuik (modified form of quicksilver, mercury) are placed. The amalgamator is then spun using a water wheel placed in a flowing river. After the gold has been taken up by the mercury the mineral residue is separated from the amalgam by panning. The excess mercury is removed from the amalgam by filtration through a piece of fabric, and squeezing with the palm of the hand, which leaves a hard lump of amalgam, discard unbound mercury into the river. The remaining mercury in the amalgam is then removed by burning it in a tong (barrel). Because mercury vaporizes at a much lower temperature than gold it can be driven off by heat leaving the gold behind, a process which is locally known as digembos.

This process is essentially the same as that used in other parts of the world though the machinery employed and the sources of power to grind, mix, and separate vary. The literature indicates that this technique, due to its emission of mercury into the atmosphere and water supplies, has alarming health and environmental implications. Although deforestation in the Amazon basin has been recognised as the main cause of contamination resulting from the release of large quantities of naturally occurring

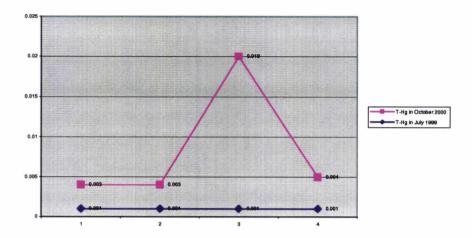
mercury into the rivers, according to Veiga and Meech (undated) the 'garimpos' miners released at least 30 to 45% of the mercury introduced into the process; 70% by volatilization during amalgam distillation (when proper retorts were not used), 20% dragged with the amalgamation tailings and 10% volatilised in the gold shops when gold was melted. Indeed, the toxicity of mercury and its compounds has attracted much attention since the Minimata Bay pollution incident in Japan. Mercury is an extremely potent neurological toxin though the threshold for mercury effects is not well known in that it may vary with the pattern of exposure (e.g. Dumont 1995). Mercury is a cumulative poison and humans assimilate mercury mainly through food and drink, although it can be absorbed from the air and through the skin. People engaged in the amalgamation process may be exposed to high concentrations of mercury by inhaling the fumes arising from the burning of the amalgam in pans or furnaces. People who primarily feed on fish caught from local rivers are at high risk of poisoning since the mercury in the aquatic systems is metabolising with bacteria forming methyl mercury, but also with the mercury bio-accumulating in the fish the risk may move a great distance from the primary sources of mercury pollution.

Interestingly, Kasepuhan have until recently consistently claimed to have never experienced any unpleasant consequences of using mercury in the extraction of gold. They have believed that mercury released into the rivers is precipitated and thus rendered harmless to their health. Some Kasepuhan see little risk as long as people stay on their own share, that is that they are not **sarakah** (greedy). Gold is occasionally available for human use, indicated by a sign from the **alam** at the time when it is deliberately released to humans. A particular form of mist above a particular part of the forest signifies the release of this gold, at which time the person for whom it has been released may collect it. However, the situation now appears to be changing, and some Kasepuhan are beginning to complain of mercury poisoning. They have learned from radio and television broadcasts, and through rumours passed from person-to-person, that mercury causes **kangker**, 'cancer' (borrowing the official Indonesian terms), a word which is quickly taken by many Kasepuhan to refer to modern diseases which are fatal but cannot be easily defined by them.⁴

⁴ It is becoming evident elsewhere that national campaigns of health, introduced through local schools and representatives, rely heavily on Western concepts of illness and medicines. However, to discuss illness labels is not simply a matter of borrowing a term e.g. 'cancer' from European (or <u>kanker</u> from Bahasa Indonesia), as they may transform into different meanings. For some examples see e.g. Jordaan (1985:196-203).

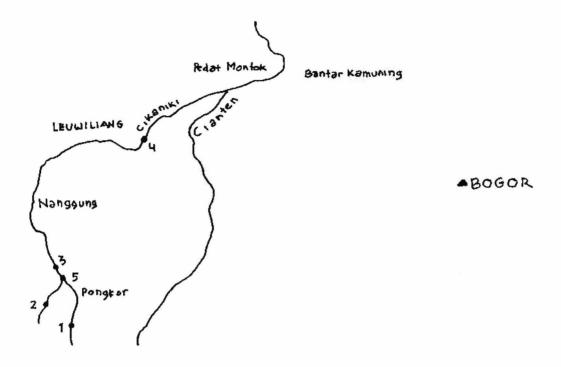
In the light of these increasing Kasepuhan complaints, it is interesting to note that data presented by PUSARPEDAL-BAPEDAL-JICA (1999, 2000) showed that at the time of my fieldwork in July 1999 the T-Hg in the river water remained below the standard set by the Indonesian government, except for drinking water which remained at the same level of 0.001 mg/L. However the T-Hg level increased substantially within a year. From July 1999 to October 2000 it rose to well above the level for drinking water, and the 0.002 mg/L for fishery and animal husbandry though was still below the 0.005 mg/L for agriculture and industry. The highest jump at the third point representing the location where there is amalgamation activity in upstream areas (see figure 7.2).

Figure 7.2 Level of T-Hg in the water at four locations (see figure 7.3: point 1,2,3, and 4) for the years 1999 and 2000.



Fish sampled in 1999 (for the sampling location see figure 7.3: point 5), show an indication of mercury between 0.05 mg/kg and 0.16 mg/kg, which is below the 1990 International Chemical Plan Safety threshold of 0.40 mg/kg. However, with the increase of the T-Hg level in the water shown in the figure 7.2 the fish now represent a considerable potential hazardous for the future.

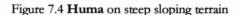
Figure 7.3 Location of water (1,2,3, and 4) and fish (5) sampling points

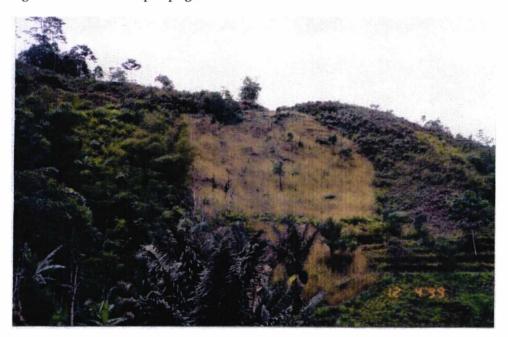


The hair of five miners has been examined and has been differentiated in accordance to their role. They are penggali, who dig the holes, pemahat, who hew the rocks, pemikul, who deliver the rocks, pengolah, who process the amalgam, pembakar, who burn the amalgamated gold, and penampung, who receive the gold bullion. These various roles, however, are commonly not strictly divided, and are sometimes interchangeable and performed concurrently. Thus, whilst pemodal and pelindung hold the same position of patron, often called boss emas, who provides capital, they often also act as the owner of the mine. Among these various roles, the pembakar is found to be the most risky role compared to the WHO standard of 6 mg/kg. With almost the same length of involvement in mining, about 20 years, Juber the pemahat/penggali/pemilik possessed only 3.6 mg/kg compared to Dion the pembakar, who has 390.9 mg/kg. After 12 years mining Kasron the penggali/pemahat has 0.6 mg/kg, whilst with 10 years Suhendi the pemahat/pembakar has 122.5 mg/kg.

Despite many reports about mercury poisoning, there are still Kasepuhan who are involved in PETI. Most of them are young, between the ages of 16 and 40. These persons are inclined to argue that farming only provides food, while their needs are greater than just food. The amount of land available is now restricted and when available is usually inconveniently located e.g. far away from the village on steep sloping terrain (figure 7.4). Furthermore, in the context of what many call the <u>krismon</u> (monetary crisis),

gold mining provides better returns than alternative sources of cash, a view even shared by government at the national level (Sunderlin 2002). It is quick and only needs the investment of labour. For example, in one week of mining Sesepuh Girang obtained 20 million rupiah, while, on a different occasion, Mang Dana obtained seven million rupiah.





Other warga, however, on hearing such frequent arguments respond by saying that without people willing to take care of the rice there will be no food, and that the young people only desire to own motor cycles, good houses, etc. The elders note that it is increasingly the case that many rice fields are left uncared for. Often, these are harvested before the rice has ripened, to accord with the schedule of gold mining activity, or harvesting is delayed because owners are preoccupied with mining, 'kapopohoan ku emas' at Pongkor. It is argued that their greed for gold means that that such miners are lost to the kaéling, living in the lower world 'like rats', and are particularly vulnerable to mercury poisoning. Because the miners dig tunnels into the ground, Kasepuhan interpret the habitat of contemporary humans as not confined to living in the middle world, but also encroaching the lower world of the other. Thus, although change in economic practices has rendered traditional solutions to misfortune useless, and placed Kasepuhan in a wider Indonesian social nexus of cause and effect, these changes are still given meaning in the context of traditional Kasepuhan cosmology.

7.3 Gold mining tunnel collapse

In addition to the new perceived hazard of mercury poisoning and the impact of mining activity on rice production, another hazard associated with gold mining is the collapse of tunnels. There are Kasepuhan who maintain that pahare-hare, not caring about other people, is a trait characteristic of present day humans, noting that in the contemporary world it has become normal to sacrifice other people in order to receive personal benefit. Many miners, Kasepuhan and non-Kasepuhan alike, believe that the gold which they seek to obtain is 'owned' by Jin, a supernatural creature.⁵ In order for humans to obtain gold, gold which is not deliberately released by its owner, it must be exchanged for some other commodity or payment, as in any other trading transaction. It is assumed that some people have acquired the knowledge of how to do this from jelema pinter, 'clever people', knowledge from the time when the owners of the gold asked for wadal, human sacrifices, in exchange. On one occasion the victim was a warga Kasepuhan, Mang Dana. Whispered rumours indicated that Mang Dana's babatang (corpse) was in the form of a teu biasa (something that was not normal), like a wayang golek (puppet). His soul had been taken by a gold owner. In order to release him, and to give him back his normal death and the appearance of a human being, his family had to make a sacrifice to Jin, to exchange him again, with the help of a dukun (shaman). It is thought that people concealed this wadal information from others and simply waited until a disaster occurred, such as the collapse of a tunnel, resulting in some fatality, which would be understood as a signal that the owners had taken their payment and were satisfied. For this reason the period following such events are considered 'safe' from a mining point of view, their being some time before the next wadal would be due. Such a perception of low risk - indeed the absence of risk altogether - immediately following a disaster – is widely found throughout the world, if not the supernatural explanation. Even after an air crash it is widely thought that it is safer to travel than before, having somehow consumed an available quantum of disaster proneness. In the Kasepuhan case, the more victims the larger the wadal, that is the more victims in a particular disaster the more 'insurance' it is assumed has been collected by the owners, and therefore the longer the time interval before the next wadal. Thus, in this view the bigger the disaster the

⁵ Such views of gold as the property of supernatural entities are not confined to the Kasepuhan. According to the Duna people of the Southern Highlands Province of Papua New Guinea, gold is owned by a giant snake named Puyara who lives under the ground (Stewart and Strathern 1999).

⁶ This kind of 'contract' with certain kinds of spirit, whereby those who wish to acquire sudden riches have to pay a price, is found throughout the island of Java. Accounts vary, but they all involve an

more gold can be extracted in the period following a disaster. Therefore, in one sense, the cultural logic provides little incentive to encourage others to manage risks by taking precautions by way of protective clothing, tunnel reinforcements or avoiding seasonally dangerous times, as this will reduce the risk-free opportunities for others and the general productivity of gold mining. On one occasion, I was in Palanggaran following a mining disaster in Pongkor which had resulted in many deaths. On the day after the accident many people were seen to pass by on their way to Pongkor to mine. For the Kasepuhan observers this was accounted for in terms of people taking advantage of the great wadal that had just taken place and the abundance of gold it would inevitably release.

In all of this, Sesepuh Girang says that he 'teu ngalarang oge teu ngajurung, neither prohibits nor encourages', implying that how people behave in such matters is their own individual business. He realises that in this historical era Kasepuhan have many needs, many of which are new in terms of Kasepuhan precedent. However, although individual Kasepuhan are free to act as they wish, without the constraints of tradition, they will still usually ask for permission from Sesepuh Girang and for his blessing before engaging in gold mining. On returning from a successful mining trip they will give Sesepuh Girang one or two plastic bags of unprocessed gold ore. But by accepting this Sesepuh Girang delivers an ambiguous message to the warga. Accepting gold from the miners has been interpreted by some as his support. At other times he mentions that the gold should be only mined when necessary and, importantly when it is available in accordance to alam. He reasoned, on one occasion, that it is only because he needed to raise funds to maintain and repair the electric turbines of the hydro-electric scheme that he requested that several people seek gold. It may be that Sesepuh Girang is here looking for a rational reason to justify the mining (i.e. that it is the collective interest of Kasepuhan), or it may simply follow some other Kasepuhan that his attitude reflects new aspirations nurtured by an increasingly close relationship with a wider world. They continue to discuss the moral dimension of mining, and a clear policy has not yet emerged.

7.4 Domestic pollution

Domestic waste - **runtah** - represents a special and interesting case connected with the government campaign of <u>kebersihan</u> (cleanliness). While it is true that standard domestic garbage can contain chemicals and biological matter which may endanger the

agreement. It may in the form of a human sacrifice, or it may be that their own soul must be enslaved or

health of humans, and that of other animals and plants, part of the problem with this kind of pollution (certainly in Western contexts) is its visibility, and its infringement of culturally-embedded aesthetic codes of tidiness. Comparatively, there are strong differences between cultures and between groups within the same society, as to whether domestic garbage and, for example, street litter, are visually offensive, and therefore polluting, or whether old discarded objects are 'rubbish'. According to Thompson's theory of rubbish (1979) we value objects as transient, durable or rubbish, but that these categories are not necessarily constant over time, transforming from one to another. In the Kasepuhan case attitudes to garbage cannot be separated from the dynamics of their cosmology. Thus, they do not traditionally consider domestic garbage as waste because it is seen to eventually return to nature, the alam, and in this regard we can draw an interesting parallel with the attitudes of sections of the global Green movement, which distinguish organic from inorganic, recyclable from non-recyclable, and therefore, sustainable and non sustainable, rubbish. Every Kasepuhan household has a woven basket made of bamboo for temporary garbage disposal in the kitchen. At present there are three locations for garbage disposal (jarian) at the village level, one behind the Si Jimat rice barn. Another is at the back of the Bumi Ageung and yet another located just outside the village. They are basically at the periphery of the village (figure 7.5).

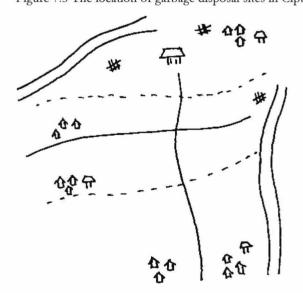


Figure 7.5 The location of garbage disposal sites in Ciptarasa

Mang Kasim, the Tukang Beberesih Kampung, the official responsible for village cleanliness appointed by Sesepuh Kampung, digs pits and buries the garbage. These methods were and 'are' apparently sufficient.

Kasepuhan garbage does not yet present a significant problem, but the use of commercial packaging made from non-organic materials, especially plastics, create a potential long term problem. Examples include shop-purchased instant noodles (e.g. Indomie and, the favourite food of children Mie Remas, which costs only Rp.100 a pack), tubes of toothpaste, shampoo sachets and washing soap, and plastic bags. There are attempts to burn the rubbish but the material does not burn completely, and gives rise to unpleasant smoke and smells, while at the household level people usually simply throw the small plastic things into the fire. Mang Kasim suggests that since these items do not decompose, are not as we might say bio-degradeable, once accumulated they render the land unstable, making it prone to landslides and unsuitable for re-cultivation. Refuse is increasingly associated with defilement which might prevent the land from being used for other purposes.

These material changes in the form and volume of garbage sit uneasily in the minds of several Kasepuhan people. Listening to government campaigns, such as those concerning jagalah kebersihan, attending a course to become a guide on eco-tourism projects and accompanying biodiversity and ecology researchers around the Kasepuhan villages, all provide opportunities for Kasepuhan to learn about the character of plastics and the problems which accompany them. Others mostly acquire the jagalah kebersihan philosophy through television and radio. Therefore, there are Kasepuhan who are aware, who anticipate the growing waste problem, and who make an attempt to prevent the problem of 'accumulating runtah'. There are Kasepuhan who have come to an understanding that waste could become a major problem if people simply accept the present situation. The issue has been raised, for example, with some of the visiting researchers. In 1995 or thereabouts someone from ITB (the Bandung Institute of Technology) conducted research on the plants and soils of the Kasepuhan area. According to several Kasepuhan this researcher explained to them that ITB had knowledge of how to process these kinds of plastic garbage completely and, in the near future he, with his other colleagues, would come back to teach Kasepuhan about the

⁷ In developed economies rising levels of private consumption for mass produced commodities has meant that packaging waste now contributes about 35 percent of the weight and 50 percent of the volume of household waste. Parallel with this is the increasing proportion in the use of materials which are difficult to recycle, such as mixed plastics, laminated and waxed cartons (Gandy 1994). See also his explanation (ibid: p. 26) concerning the hazards of burnt plastics.

process. Three years passed and up to and including my time in the field no one from ITB had arrived.

The issue of how to handle garbage is closely related with Kasepuhan identity, in the sense that they aim to present themselves as masarakat adat/tradisi, a traditional society conforming to adat, but at the same time not being backward (Ind. terbelakang). Garbage, therefore, is of some importance in terms of how they visually present themselves. Kasepuhan maintain the cleanliness of Ciptarasa, the Kampung Gedé at all times. The organised activity of cleaning the village must be undertaken before all big ceremonies which involve the welcoming of outside guests. The knowledge of 'jangan buang sampah sembarangan' (of not throwing the garbage just anywhere), which was introduced as part of the government campaign of 'kebersihan', means that kotoran and sampah (dirty things and rubbish, respectively) should be removed, out of sight and out of smell. Guests should not eat fish from, for example, a Bumi Ageung balong (pond) if a kulah is located above it. Some guests confuse the function of a kulah with that of a bathroom. In fact, a kulah is only used to clean leftovers from meals or kitchen articles (generally waste that contains organic matter only). But, of course, with increasing use of soap and detergents, scums and foams often form on the surface of ponds which are considered jorok, 'disgusting', by outsiders, and by some Kasepuhan as well. With the interest shown by television stations in making cultural films, Kasepuhan are concerned that their villages should avoid dirt and waste which might be **ngérakeun** (embarrasing). Tourist guests are only taken to 'ready villages and households'. Examples are Situmurni and Palanggaran, which each have a pasanggrahan (villa) and a small pond and parahu (canoe). Thus, garbage is not simply a material and practical hazard, but involves the construction of a category in the context of a modern discourse of health and aesthetics, which has made it a conceptual, moral and social hazard as well.

A different situation pertains with regard to Kasepuhan attitudes towards indoor smoke pollution. Most Kasepuhan people still use a **hawu**, stove, as their main apparatus for cooking. The price and the amount of kerosene they consume make a **kompor**, cooker, generally too expensive When a household has both a stove and a cooker, the stove is used more often and for longer, while the cooker is used only when the time and volume of cooking demand it. In other words, the cooker is held in reserve. **Gebingan**, that is a log of hardwood, e.g. *Quercus sp.* or *Altingia excelsa*, are the most preferable due to their capacity to burn and heat efficiently. But access to wood resources have long been restricted. Log of a hardwood is available in villages but is expensive. So it is restricted

mainly to the elites, while the **cokrekan**, that comprise of small branches and twigs, is the alternative for ordinary **warga**. In the heavy rain season, when it is difficult to obtain dry wood, when drying wood takes a long time, and when burning damp wood creates smoke that irritates the eyes and affects breathing, Kasepuhan burn bamboo. Bamboo dries easily, but burns quickly with less sustained heat. Bamboo also produces a lot of ash which means stoves have to be cleaned more often. But besides its disadvantages, bamboo ash can and is used as fertiliser.

Most Kasepuhan kitchen walls are made from plaited bamboo which allows air to circulate and smoke to escape, but the effect is only limited. As the kitchen is also windowless and the stoves do not have chimneys, the kitchen is full of smoke while cooking is taking place. Traditional biomass stoves are regarded as very inefficient – to have energy efficiencies of only 5 to 10 percent. Various studies (e.g. Smith 1999, Barnes et al 1994, Peskin et al 1992) note that biomass fuels, including fuelwood, have long been connected with the environmental problems associated with energy efficiency, climate change, and deforestation. The resulting smoke also exposes people to health-threatening pollutants found in the biomass. The risks increase when exposure effectiveness is high, such as when cooking indoors in an unventilated or partially ventilated kitchen. Inevitably, particularly women and children accompanying their mothers are exposed to heavy smoke daily. Acute respiratory infections in children and chronic obstructive pulmonary disease in women are the strong evidence of the risks posed by indoor pollution.

Programmes for the introduction of improved biomass stoves have been instigated worldwide with both successes and failures. Kasepuhan too engage in some discussion about stove design, prices and materials used, but it is not considered a priority though several households have experienced more **gawe** (work) in finding wood for fuel compared to the situation in the early 1980s. Sometimes it is much easier to buy fuelwood from someone else: four thousand rupiah for **satanggungan** wood can provide a household of four with about one week of fuel. **Satanggungan** consists of a pair of bundles which are each approximately 20 **pasi** (pieces of wood). Each **pasi** measures about 40 cm in length, 15 cm wide and 5-10 cm deep. For Mang Kokon, buying wood rather than cutting it himself is a means of freeing time for incomeproducing activities, such as serving as a guide for visitors. For Mang Arta, a builder, it releases time to work in his neighbour's house. Both of them can obtain 10 thousand rupiah per day. With this arrangement, two objectives can be met: labour efficiency and

avoidance of the risks involved in 'stealing the wood'. This risk is now shifting to those who are prepared to take it, leading to the creation of a new specialist occupation of collecting fuelwood.

In discussing hazards and risks associated with domestic fires we are not, therefore, just concerned with cooking itself, but with wider economic and social considerations. The present level of smoke is regarded as acceptable by many, even useful. Smoke serves to dry agricultural products, and to protect seeds from insect attacks. Wood burning results in better smelling and tastier food. Certain foods such as fish, **boléd** (sweet potato), **ulén** (snack made of **ketan**), and bananas are often roasted in the hot ashes of a fire. The smoke is said to make them more delicious. Often people also use hot ashes to cure itchiness when they arrive home from the rice fields. Heating of domestic space is another benefit. Social activities, such as gossiping and communal eating, for example, usually take place near fires. Interestingly, these lifestyle features are sometimes found attractive by 'modern' middle class people, the highest percentage of the Halimun's visitors. Visitors have been heard to comment — 'susah cari yang seperti ini di kota', that it is difficult to find such trendy 'natural' things as this in the city. Thus, unlike garbage, which is generally agreed should be kept to a minimum, there are reasons why people do not see the hazards of smoke-generating fires in the same way.

7.5 High yielding rice varieties, pest infestations and crop failure

Beginning in the late 1960s, the Indonesian government launched a food campaign which was focused on rice, which became known as the BIMAS (Ind. bimbingan massal, lit. 'mass guidance'). Its primary aim was to encourage new 'IR' rice varieties which had been developed at the International Rice Research Institute (IRRI) at Los Baños in the Philippines. The BIMAS programme consisted of a 'Green Revolution' package: better land preparation, better irrigation, high yielding rice varieties (HYV), pesticides and fertilisers, all of which had to be strictly implemented. The agricultural

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⁸ Undeniably, the 'Green revolution' globally has raised overall levels of production, but unequal distribution of purchasing power has meant that the increase in food production does not necessarily result in food security (Rosset 2000). Unequal access to agricultural and other subsidised government credits, and changing technologies of cultivation for weeding, harvesting and processing have cut the costs for the larger farmers but reduced the employment access and income opportunities for workers. Harvest failures have become more frequent resulting from the new varieties' vulnerability to climatic deviations and pests, which seriously affect the income of the small farmers. All these, as well as increasing landlessness and an acceleration of the agricultural land purchased by wealthy villagers, are among the consequences of the intensification of rice production in Java since the nineteen seventies (see e.g. Manning 1988, White 1979), though Alexander and Alexander (1982), in response to Geertz's 'shared poverty' model, have argued that this unequal distribution of land and wealth amongst the Javanese peasantry has developed since the colonial period.

officials under the supervision of the governor of the respective provinces were under great pressure to achieve the targets of area planted and production levels set by the central government. The degree of achievement was used to measure the performance of the governor and the lower ranking government officials down to the village head. Not only officially, but also in practice, the area of land devoted to BIMAS and production levels became instruments to measure the overall success of a regional head, from the governor down to the village head. In their effort to achieve high ranking in their performance, local people adopted an unofficial policy which was frequently encouraged by village heads (see e.g. Hansen 1978): that when a non-HYV variety, a traditional landrace, was discovered it would be destroyed. Naturally, this practice was not officially reported and neither did the press report it. But it was common knowledge.

The BIMAS programme had reached the Kasepuhan area by the 1970s. Kasepuhan recognise that HYVs can produce higher yields and see the advantage of HYVs due to their fast growth rate which permits a single coordinated harvest period as mentioned in Chapter Six. Unlike the Baduy, Kasepuhan do not reject new varieties from outside. For example, Mang Ahali brought the Ahali landrace to Kasepuhan when he was sharecropping outside the Kasepuhan area, receiving the rice in payment for his labour. Around 1972 paré anyar⁹ was experimentally planted by Sesepuh Girang on his land in Ciarca, a village at the same altitude as Ciptarasa and at a walking distance of four hours. Although people generally thought that paré anyar grew faster and had better overall yields, in fact it created more problems than benefits. The paré anyar easily shed their grains and hence could not be harvested with the étém. Instead it was necessary to use an arit (a sickle), which violated the traditional belief that rice had to be harvested in the appropriate manner, as described in Chapter Four.¹⁰ Furthermore, because paré anyar sheds its grains so easily it cannot be dried and stored in bundles, and must instead be dried on a bamboo mat spread on the ground. This, however, is difficult given the uneven surface area of Kasepuhan settlements. For the same reason, paré anyar has to be stored in sacks, which Kasepuhan feel do not quite suit their barns. Kasepuhan also claim that there is no need to double their production, since they are already selfsufficient in rice. This is shown by the fact that, according to the guard of the Si Jimat barn (the community rice barn), for the last two years (1996-1998) no significant number

⁹ **Paré anyar** lit. means 'new rice'. For Kasepuhan it refers to high yielding varieties of rice introduced by the government.

¹⁰ This problem, of using a sickle for harvesting, is not confined to Kasepuhan. For example, the farmers living in Loro village, south-central Java, refused during the nineteen-seventies to eliminate the use of finger knife, <u>ani-ani</u> (Stoler 1977).

of Kasepuhan people have borrowed rice. People also believe that it is **teu alus**, unwise, to grow and harvest rice two to three times a year, which they metaphorically compare to circumcising someone two to three times during a lifetime. Moreover, the soil would not have an opportunity to rest which would, in turn, violate the traditional belief of sharing the time with **batara** Kala and hence would bring disaster.

Through the concept of **pancer-papadon** Kasepuhan recognise that other creatures depend on rice plants in addition to humans. Although Kasepuhan are aware of the damage done to rice plants by organisms such as rats, and of the reduction in yield which results from this, they do not consider them as **hama** (pests) in the same way as might an agricultural scientist. Kasepuhan refuse to kill them, as they say that these organisms are not causing any harm, only **ngilu**, participating in life, and anyway will not eat everything. In this sense each organism thus must have its own share and non-humans are, in the opinion of Kasepuhan, disadvantaged when compared to humans since they can neither plant, hoe nor plough. Consequently, they tolerate, for example, the rats which live off the grain in the rice barns, in many places around the village, and which are permitted to live freely inside houses even when they eat food.

Parallel with the morality of sharing is the Kasepuhan prohibition of using semprotan, literally meaning 'sprays' but referring here to artificial pesticides which are sprayed onto plants. For Kasepuhan, pesticides kill living creatures in an improper way, teu bener, that is sakabéhnakeun (massively) and teu pilih-pilih (non-selectively). Mass killing is thought not to be consistent with Kasepuhan teaching. Chapter Four discussed how humans relate to other living creatures on an individual basis since each creature has its own share, character and arrangement as taught by batara Guru. So use of pesticides is perceived to definitely invite risk, create hawa goréng (bad energy) in the alam, contaminating (ngotoran) the hawa (air), langit (sky), taneuh (soil) and cai (water). In order to be able to kill wild pigs, for example, it is necessary to undertake a magar pakaya, a ritual to protect rice plants. The ritual transform the once neutral ordinary wild pigs into members of the category hama. The hama label can only be applied to animals of so many kinds after an arrangement has been made with the batara-batari and following successful negotiations with the animals concerned. A successful negotiation means that a particular animal has willingly decided to stay near or on the rice plots and accepts the risks to themselves, nyerahkeun manéh, surrendering to the will of people, thus, consequently not bringing any misfortune.

Despite this morality of cross-species commensality, it is undeniably the case that Kasepuhan reduce the 'risk', so to speak, of rats consuming more than their 'fair share', by building higher stilts for the rice barns. This happened when the Kampung Gedé was at Lebak Larang (the third location of Kampung Gedé). This was a prosperous time for Kasepuhan as they had an abundant harvest of rice. It was during these same years that the population of rats increased. At that time the Kasepuhan did not, however, kill the rats to reduce their population. The reason behind this was that it was always necessary to keep the balance of the alam. Ki Barna said to me, 'It should not be surprising if when one side becomes higher the another side, the lawan, would follow and go up accordingly'. Thus, instead of killing the rats, which would have reduced the rice yields, they increased the height of the stilts on which the rice barns are built to prevent the rats from entering.

Kasepuhan believe food will always be available as long as they behave appropriately and understand their position in relation to other inhabitants in the universe. But mistakes always happen. In this sense people are expected to and do, contribute to the Si Jimat barn as a communal reserve when harvests are good. How much they give depends on ngarasa, their own measurement, but is always influenced by fear of being regarded anti-social by fellow villagers and fear of retribution from the Karuhun. It is, however, generally believed that it is Sesepuh Girang who contributes most. On the whole, this is thought to be right and proper as Sesepuh Girang has most land and most rice barns. If there is a shortage anyone is entitled to **nginjeum** (borrow) rice from the barn which is then recorded by the Panjaga Leuit Si Jimat, the guard of the Si Jimat barn. For each rice bundle borrowed from Si Jimat, two bundles of rice should be returned. There are people who object to this rule of the one to two bundles ratio. But there is a reason behind the arrangement, explained by the guard of the Si Jimat barn: the rice returned to the Si Jimat, unlike that taken, is un-dried. The Kasepuhan calculate rice production for exchange on the basis of total number of bundle (each estimated as weighing 4 kilogram) of pre-dried rice. The measurement has to be made straightaway after the work. One bundle of dried rice is considered equal to about one and a half bundle of un-dried rice. It was because of this calculation that there were some who considered the half bundle as just interest and teu bener, not the right thing. There should be no interest at all since si Jimat is the community rice barn. But again according to the Panjaga Leuit, the borrowing time is unlimited and no fine is imposed regardless of when it is paid back. If those who have borrowed have themselves made modest rice

surpluses then they are expected to give back whatever it is that they still owe. Again, the obligation of giving back is effective because not to do so would result in rasa éra (shame).

On the basis of the combination of moral, practical and rational considerations, particularly connected with the status of **huma**, Kasepuhan therefore have rejected HYV **paré anyar** varieties and the technological package accompanying them as the primary mode of rice production.¹¹ Indeed, to follow BIMAS would cause the arrangements with **batara-batari** to be broken and result in much uncertainty.

7.6 Biodiversity loss

That biodiversity loss poses a 'risk' is a new concept for Kasepuhan. Of course, Kasepuhan note the progressive diminishing of the forests around Mount Halimun and note the decrease in the availability of game and other animals, for example the popular barking deer (Muntiacus muntjak) and mouse deer (Tragulus kanchil) the characters of which are often used for teaching purposes.

However, this is not a dimension of resource availability which has hitherto had any direct perceived impact on their lives. Their consciousness of biodiversity loss and the problems associated with this come almost entirely through contact with outside agencies, and most specifically with their new dependency on the biodiversity conservation industry as a source of income: academic research and eco-tourism.

Research Activities. Research interest in the Kasepuhan area has increased, not only among anthropologists, but also in other fields, such as biodiversity studies, which are being sponsored by, amongst other organisations, INRIK and JICA. In 1998 Cikaniki Research Station was opened as a cooperative effort involving the Indonesian Government, PHPA, LIPI, and the Japanese organisation JICA. The Station was intended to be used for research activities and was furnished with some equipment e.g. computers. In the same year, a Canopy Trail with a total length of about 3.8 km was built nearby the station.

INRIK, based at Padjadjaran University in Bandung, has conducted a two year medicinal plant project which started in late 1998. The focus of the project has been to determine the various medicinal plants used by women in one survey plot. One plot just

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¹¹ Studies by Winarto (1997) tell how farmers in the village of Ciasem Baru on the north coast of West Java, along with the adoption of HYVs remained interested in planting and experimenting upon the traditional varieties and methods (e.g. the use of the <u>ani-ani</u>, finger knife).

outside Ciptarasa village has been selected. It is expected that through this project the biodiversity of local medicinal plants can be identified and maintained, and is in line with the popular global movement for the increased use of phytomedicines. The use of natural remedies is being nationally promoted, in particular it is popular among the Ibuibu RT (the women of rukun tetangga, the lowest level of neighbourhood organisation). Among the Kasepuhan the Indung Beurang is the person with the responsibility for coordinating the activities of women who have been selected for the medicinal plant project. The Indung Beurang, however, often said to me that she did not know anything about the project except that they are being instructed by ahli to 'collect plants, plant them in the designated field, and keep them alive by using some tools that they receive. 'And don't forget to give them water whenever there is no rain'. There were women who complained that this represented quite lot of additional work, as they had to inspect the field regularly in order to maintain a suitable condition for the plants to be healthy. In general, this project is not popularly supported. Also, only a few people actually have access to this resource and take decisions about access. Thus, while practicality is one of the aims of the project it is not being met. As we have seen in chapter six, the kepakan social organisation, for example, has been made available by people in order to meet their needs. Here it seems that the mode of delivery is being put before the effectiveness of delivery and the needs of the people.

The researcher impacts on the lives and traditional knowledge of Kasepuhan in various ways. Japanese come asking questions about bamboo and rice landraces. Researchers from INRIK ask questions about medicinal plants. For Kasepuhan, this entails not simply that someone can provide answers to the questions that are asked but entails establishing who has the hak, the rights, to explain the relevant knowledge, even though other persons may know it. The medicinal plants used in childbirth, for example, should only be explained by Indung Beurang, and the plants used in agricultural rituals, by the Urusan Jero elder. Also, there is knowledge which should be confined to Kasepuhan. In addition, in matters of explanation there are sometimes practical problems of cultural translation. Thus, in answering questions concerning the physical measurements of natural objects, Kasepuhan use kira-kira (approximate measurements), for example, the jeungkal (the distance between the thumb and the little finger when they are stretched), the jari (the width of a finger), the sabuku (half of the finger, from top to a knuckle) and the léngkah (a pace). It is only to be expected that arguments arise, as each person's finger is different even though the researchers may insist on trying

to standardise it to the equivalent of a centimeter. In such circumstances it was often preferable to show the material directly to a researcher than try to explain in the abstract. But even in the context of the actual objects in their natural setting, the reason for exact measurement was not always clear, for example the reason why fertiliser is applied at a distance of one **jeungkal** around the rice plant. The researchers were often very persistent, sometimes arguing, even when it was explained to them that it was **kuduna kitu** (simply that it must just be done like that). At other times **warga** know the answers to questions but cannot articulate them easily or explain in a way which would make sense to the researchers. In particular, **warga** sought to avoid 'interview sessions', which they admitted gave them **rieut** (headaches), especially after one or two hour sessions.

Having escorted researchers for several years Mang Kokon, for example, has learned to anticipate what questions will arise and what answers tend to please guests. Interestingly, Kasepuhan were puzzled on one occasion when I failed to ask the questions to which most researchers seem to seek answers. At another time it was they who took the initiative in describing things they thought I might want to know. Kasepuhan who want to become guides and escorts apprentice themselves to other 'more' experienced warga, to learn about those things researchers are interested in. They discuss things between themselves and ask the elders in an effort to acquire knowledge, but also to seek permission from the elders to transmit such knowledge to non-Kasepuhan. They learn to explain themselves clearly backed-up by sound knowledge in a way which researchers expect, and they learn not to take things for granted, on trust. The open discussion of the Ciawitali entrusted forest case discussed in chapter five, for example, demonstrates that at the end of the day they do not simply wait for Sesepuh Girang's legitimation to interpretate a sign but may rationalise events in other ways. There are Kasepuhan who, as a consequence of being guides, have become more aware and notice things which might never have come to their mind before, for example that some species are now rare, or have even, perhaps, become extinct. Thus, the Javan gibbons (Hylobates moloch) which in former times could be seen and heard at the edge of the forest are now rarely audible or in other ways evident. Collecting data on particular species which are relevant to the questions which researchers ask has taught Kasepuhan to know their biodiversity better: what is considered rare, endangered, or even beautiful in the eyes of the researchers.

Inevitably, there are pros and cons to all of this. Those who are being paid to guide the researchers are naturally happy: it delivers considerable **géngsi**, high status. For

many of them, as soon as they are trained, it is easy work. They are familiar with the local situation, for example, and know where to find particular species. Some of these species can command, for Kasepuhan, large sums of money and their sale becomes a source of alternative income which is very welcome at a time when the cost of living is increasing due to inflation and with rising lifestyle expectations. 12 For example, Mang Kokon was very happy to receive one US dollar for finding and delivering a particular species of spider to a Japanese researcher, who had been looking a long time for this species. And again, just before serah taun in the year 2000 several young people went to the forest to look for a certain species of beetle, during the night, the amit-amit time, both a place and a time in which dangers are perceived as being much increased. Before they left they discussed among themselves which beetles to look for and how much they would sell them for. These beetles would provide them with cash to enjoy the festival of serah taun. A family at Cisuren had a three month old Javan Hawk Eagle (Spizaetus bartelsi), which they wanted to sell for one hundred thousand rupiah. Mang Asima asked for help to change one US dollar in the city which he had earned for getting a certain spider species. Those who do not approve of the collection of plants and animals for money regard such people as mahiwal, an 'out of order' person, or 'jelema gélo' (mad). 13 One man died because he fell from a tree when trying to get a bird from its nest, the mother bird pecking him in the face, an outcome which only served to reinforce local perceptions of such behaviour. Collecting plants and animals without respecting the position of batara-batari is considered a serious offence to traditional authority and therefore constitutes a calculated risk incurring certain sanctions. Some warga expressed themselves as being very disappointed, suspecting that their paré had been taken by visitors, with the help of a particular warga, but without permission from Sesepuh Girang. Some also recalled hearing that traditional Baduy rice varieties had once been taken outside the Baduy area without permission, which was similarly regarded as cosmologically dangerous.

<u>Nature and Cultural Tourism</u>. For the Indonesian government tourism is an important source of income and destinations throughout the country are being promoted heavily, including the area where the Kasepuhan villages are located. There are three designated

¹² At the national level the value of <u>satwa langka</u>, endangered animal trading, is estimated by ProFauna Indonesia (a Malang based NGO) at about 5 billion rupiah per month, linking officials and villagers at the local level to International networks (Gatra 14, 20, 21,28 January 2002).

¹³ In a similar way, madness (Ind. gila) is described by the Iban of Sarawak as 'out of order' and as pollution (Barret 1997).

areas around Mount Halimun for tourist development: Cikaniki-Citalahab in the East, Pangguyangan in the South, and Leuwijamang in the North. Several infrastructures have been built in support of these sites. There are tourist loop trails that connect Cikaniki Research Station, Nirmala tea plantation and Kampung Citalahab. It was in 1997 that sign-posts and other signs were erected, partly through donations from Perth Zoo in Australia, and also JICA. There are signs which provide information about the Javan Gibbon (Hylobates moloch), Leopard (Panthera pardus), and Javan Hawk Eagle (Spizaetus bartelsi), and also for vegetation. JICA made information available to the public on some plants by putting plates on tree trunks. There is also a plan to create camping sites in these areas.

The Leuwijamang, Pangguyangan, and Citalahab sites each have a pondok wisata (a guest house) with a capacity to accommodate, accurately determined, 34 persons. Accommodation costs 50,000 rupiah per night/room including towel, soap and shampoo. The construction of these guest houses was initiated in 1995 as part of the project 'Community Based Eco-Tourism in Halimun' developed by the Consortium for Eco-tourism Development TNGH (KPPETNGH). This was made up of PHPA (Forest Protection and Nature Conservation of the Department of Forestry), Wildlife Preservation Trust International (WPTI), the Center for Biodiversity and Conservation Studies of the University of Indonesia, McDonald's-Indonesia, and BScC (Biological Science Club, a Bogor based NGO), targeted to train local people in management, record-keeping, guiding and other tourism-related skills, but also involved in the development of a small bamboo-based handicraft industry. In the three years between 1995 and 1998 the Consortium received grants to the value of \$448,430 from the Biodiversity Conservation Network (BCN, a USAID-funded programme). This latter programme has two goals: firstly promoting community-based conservation and, secondly, testing the hypothesis that if local communities receive sufficient benefits from a biodiversity-linked enterprise, they will act to conserve it.¹⁴ The target market for ecotourism is primarily middle class Indonesian and expatriate residents of Jakarta and Bogor, university and high school students, and other foreign tourists (BCNET 1997).

¹⁴ By definition, the character of eco-tourism involves travel to natural (usually) fragile destinations, minimal environmental impact, builds environmental awareness, benefits local communities and encourages conservation (see e.g. Ziffer 1989, Shackley 1996, Child 1997, Honey 1999). The CAMPFIRE project in Zimbabwe, through the devolution of economic benefits, has achieved some success. According to Child, the benefits from wildlife which reach local people at the grass roots provides them with strong and direct incentives to practice conservation. The objectives of eco-tourism, however, are not easy to meet, as discussed by Honey (1999) at length, particularly due to it involving low-density luxury tours

As of 1999, the Leuwijamang and the Pangguyangan guest houses, both physically and administratively, had been handed over to local people two of which were Kasepuhan.

To meet the target the Cikaniki research station has been built, nearby the TNGH Kabandungan head office, which provides office space and a seminar building which can be hired, at about 20 km from Kabandungan. To the northern side of the park the UI (University of Indonesia, Jakarta) research station, which at present is used mainly for the benefit of UI students, is projected for the use of the public. A list of locally salient species of the TNGH's unique flora and fauna has also been highlighted and published, and this together with 12 waterfalls, three cliffs, three mountain tops, two religious sites, all suggest a potential for developing eco-tourism.

Attendance figures are shown in figure 7.6 (adapted from Hasibuan 2002). These show a reverse ratio of foreign and domestic tourists and a high jump in foreign visitors for 2000-2001.

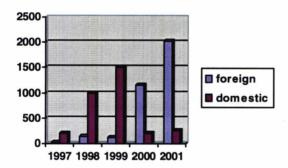


Figure 7.6 Comparison of numbers of foreign and domestic tourists, 1997-2001

In promoting eco-tourism around Mount Halimun the Kasepuhan area has been especially targeted because it provides a unique combination of ecological and cultural elements. Kasepuhan warga note that an increasing number of visitors are coming to their area. During the serah taun, Ciptarasa has become a hajat hiburan, an entertainment fair. Modified traditional shows are being performed, such as dangdut, which compete with the traditional performances of wayang golek and pantun. Warga hosts expressed to me at length their pride in having so many guests. But besides bringing benefits guests have also presented problems for the warga.

Generally, Kasepuhan villages are very safe places. But recent events, for example, during the **serah taun** in 1998, when one guest lost a pair of shoes, while in

which can only be afforded by the richest or largest companies, in contrast to low budget - higher volume tourists.

another household, a camera and a video camera went missing, security has become a problem. The guests claimed that their belongings were very expensive. Kasepuhan expressed a deep feeling of éra (shame) due to these events. The missing objects had still not been recovered a year after. Locally, there was a strong belief that the thieves were not warga, as no warga can be hidden for long from community sanction. To prevent a reputation for teu aman (insecurity) becoming attached to the entire Kasepuhan population it was decided that each individual household must take responsibility for keeping an eye on guests belongings. In the following year (1999), at the time of serah taun, there was a policy of locking doors. But it was not always the case that guests stayed in the house of a particular warga, and it was also not always the case that a particular warga was ready to receive guests. So some warga preferred to stay at home guarding their guests belongings instead of enjoying the entertainments outside. We can see here a shift from notions of collective community responsibility to individual household responsibility brought about by increased levels of theft associated with tourism. For Mang Odi, Sesepuh Kampung of Situmurni, Kasepuhan involvement in the tourist business is regretted. Soon after his appointment as the guard of Emak's villa in Situmurni, he had to move nearer to the villa, far from his rice fields. Because he was taking care of guests for two successive years, he could not harvest his own rice fields.

Another consequence of tourism has been that warga have learned to fix a standard price for their services. For example, to perform dogdoglojor and debus it has been agreed by officials - encouraged by Sesepuh Girang - to charge 250,000 rupiah per performance, excluding meals, accommodation and transport. Escorting a guest costs 50,000 rupiah per day excluding meals. On two occasions, however, Ki Karma, who was in charge in the debus performances felt so éra at having to explicitly mention the cost, that he only received 50,000 rupiah for one performance, and 80,000 for the other. As this money has first to have all expenses deducted from it, and then has to be divided between all persons involved, each ended up receiving an average of 4,000 to 6,000 rupiah for a full day of work, which frankly speaking is not enough. There is a cultural preference to leave the decision to the recipient of the services and an unwillingness to be too up front in mentioning the standard charge. Common responses to visitors asking how much something costs included Mang Kokon saying, 'gampang baé', 'easy, things can be arranged later', Ki Karma saying 'kumaha baé', 'whatever', and Mang Absor saying 'mangga baé', 'up to you'. As warga are generally reluctant to state the cost of their

services to guests, the exchange is often unequal.¹⁵ For example, Indosiar, the private television company, only gave Kasepuhan a set of cups with the Indosiar logo on them, and money amounting to ten thousand rupiah in return for three days of Kasepuhan hospitality. Kasepuhan describe the moral dilemma they face in reconciling their own cultural norms and achieving a fair payment, as 'wanina ngan ngomong ditukang', 'being only brave enough to speak behind peoples backs'. Thus, there are Kasepuhan who consider the desire for money as morally wrong in itself, and are critical of the very idea of selling **tradisi**. Others agree that their services and culture can be marketed but only on condition that it is carefully selected and agreed upon first. Some agree to the commoditisation of culture but are reluctant to standardise the cost. In addition, there are those who agree with either of these two latter positions but are not brave enough to speak openly. Thus money and material goods are increasingly the subject of Kasepuhan discourse in terms of the morality of **kahayang**, willingness.

¹⁵ The issue of unequal exchange between tourists and local people has been widely discussed in the literature, see e.g. Hoskins (2002) who notes that the Kodi of Sumba see tourists as predators and consumers of their life and for this reason insist on a more favourable exchange.

Chapter Eight

Conclusion

8.1 Apprehending risk: two contrasting cases.

Academic research on risk conducted over the last 25 years has shown fairly consistently that official, scientific, bureaucratic and academic perceptions of risk do not fit easily with the perceptions and assessments of ordinary individuals. The work of many (e.g. Douglas and Beck and Furedi) have attempted to understand why this should be so. Much the same can be said about environmental hazards and risks in particular, and here (as was shown in Chapter One) much depends on local conceptions of what is regarded as environmental and natural. In this final chapter I summarise how Kasepuhan perceive their contemporary risks, and show how with increasing incorporation into the wider world outside Kasepuhan, and through the influence of government agencies and media, their constructions of the environment, the risks it poses, and the ways these risks can be managed, are changing. I begin, however, with two contrasting case studies which conveniently illustrate an enduring principle of how Kasepuhan understand risk.

Case 1

In December 1999, while I was conducting fieldwork in Kasepuhan, a landslide occurred on a steep bank of the river Cisarua below Kampung Sirnarasa. Fortunately, no house was damaged and there were also no human casualties. However, the footpath from Sirnarasa to Ciptarasa was covered by the debris and the bridge was destroyed. As a result people had to cross the river by foot, which at certain times (due to heavy rain) was made impossible because of the rapid current. Local Kasepuhan did not describe these events as 'a disaster' (or indeed, as misfortune or bad luck, 'celaka', in Indonesian). Rather, they considered it as a quite neutral natural event, about which people merely said 'teu kukumaha longsor, biasa lamun loba hujan', 'well it's not surprising that this happened as it is the rainy season'.

In this case, landslide may be understood as natural law which causes events to happen comparable to when 'scientists' explain earthquakes as the unavoidable outcome of plate tectonics. A crucial distinction, however, is that scientists quantify the likelihood of this happening and so turn uncertainty into a risk. However, Kasepuhan shared an altogether different view of a second event.

Case 2

In July 2000 Kampung Cicemet was heavily damaged by fire. The village lost 40 houses and two rice barns. Although a lot of property was destroyed, the inhabitants considered themselves fortunate in losing only two rice barns. Those people who lost their homes and had other property damaged were cared for by neighbours and family. 'But how about if we lost all rice barns on which our life depends', 'kumaha lamun leuit nu beak paragi urang hirup'. The fire was caused by someone forgetting to extinguish a lamp hanging on the woven plaited bamboo before going to sleep. The lamp was a very old one and set fire to newspaper used to construct wall partitions (it is usual for people to stick paper on their walls to help prevent cold wind from entering the room). Thus, in this case the explanation was 'you see, bancana originates from human error', 'tuh pan bancana datangna kusabab kasalahan urang-urang keneh'.

Whilst undesired, the landslide event described in case 1 was considered not to be **bancana** but **sajarah** (natural law), the hanging of a lamp on the woven plaited bamboo wall of a house was thought to increase the probability of disaster (**bancana**).

8.2 The cosmology of the inevitable

As shown in Chapter Four, the Kasepuhan worldview describes the universe in terms of the relations between the upper, middle and lower world. According to their concept of **sajarah**, events in the middle world happen because **tos kedah**, 'it has to happen', and because **tos waktos**, 'the time has come for events to happen'. We have, therefore, a concept of fate. Humans do not have the power to change **sajarah** and, consequently, also do not have the power to avert events with possible undesirable

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¹ But this should not be interpreted as encouraging 'passivity'. Accepting the destiny of **alam** means only managing the limit. Thus, as we have seen in Chapter Six Kasepuhan do measure, anticipate and actively manage the risk.

consequences, i.e. 'risks', which have been destined to happen according to **sajarah**. There are, therefore, events which are unavoidable and have to be accepted, because they are part of the unfolding **sajarah**. The consequences of these events, even if they result in misfortune, are not considered by Kasepuhan to be hazards in the sense that objective scientific risk analysis would understand them, because they are unavoidable. If something is inevitable there can be no risk: it will happen whether you take an action to avoid it or not. This was the position with the landslide on the footpath between Sirnarasa and Ciptarasa.

According to Kasepuhan, humans occupy the middle world, specifically the alam éling of the alam lahir. Kasepuhan look at the universe from their inner self, moving progressively to the outside world: from trunk to human to middle world to universe. The trunk, the pancer of humans, represents the affective and emotional side of humans, i.e. rasa (feelings) and kahayang (desires). With human kaéling, rasa and kahayang, kapinter (the component responsible for thinking, represented by head) and lampah (behaviour, represented by both legs and hands), and the upper and the lower world would be in harmony. These roles in turn relate to and inform understandings of the universe. Thus controlling the microcosmos, i.e. the self, human persons also control the universe, the macrocosmos. If, however, a desire becomes uncontrollable, e.g. because of the influence of Batara Wenang encouraging excessive power and greed, the resulting disequilibrium causes humans to lose their humanness and change from human person to a mere human being. According to this notion of causation the source of bancana (disasters) are humans who have lost their conscious humanity, 'sagala rupa bancana oge muasalna ti manusa'. In other words, the term bancana applies if there is gara-gara, that is individual human actors who can be identified as the cause, and therefore the risk can be avoided. is central role of rasa

One night I sat together with Ki Karma and four other men. After some discussion these men agreed that humans should be fully aware of **kahayang** (desires) as it is they which drive human actions:

Everything that either brings goodness or badness begins with desire. We want to farm, so do we, even if by that we have to be under the hot sun all day which sometimes hurts us. We do not understand why city people generally come with many complaints about the state of their life which, they often say is very busy, very tiring, with no time for leisure, when, in fact, that these are all their desires. Always following desires would 'nyilakakeun maneh', 'bring misfortune to ourselves'. The **pantun** tells us that 'nafsu kudu dikurung bisi kaduhung, amarah kudu diwadahan

bisi hanjakal' which means all desires must be regulated to avoid regret in the future. Desires should be weighed by **rasa**, 'rasa, rumasa, ngarasa', 'feeling, empathy, and self awareness'.

My conversationalists stressed that each human should have desires but having it without rasa would cause a hazard. In their terms the greatest risk is from within the human being or within the community rather than those caused by external factors. It is for this reason that rice barns are placed on the edge of the village (see p. 60-1). If these external factors increase risk, it must have been due to human behaviour, for example crop damage by insects or other animals because humans have infringed on the rights of Batara Kala. In other words, all risks are social, anthropogenic. While when alam follows sajarah, bringing unavoidable and unfortunate events, these should be accepted as they would have happened anyway, thus there is no risk.

8.3 Changing worldviews and the management of risk

Kasepuhan describe themselves as dwelling in a world of 'crowded' interests and the views of different parties. The government has allocated the land and the forest in terms of non-Kasepuhan interests. Education, health, and tourism are folded within the Indonesian government programme for extending 'access and development' to the 'isolated areas'. At the same time non-governmental actors deliver messages under the name of 'pemberdayaan masyarakat adat' (empowerment of the adat community). There are Kasepuhan who feel engap (a tightness of breath), 'set back' and refuse to be involved in the course of 'development', but there are also Kasepuhan, particularly the younger generation, who enjoy and willingly develop their ideas and aspirations in accordance with the opportunities presented by this world as it is perceived by them. The 'modern' style of the patron, of the present Sesepuh Girang, might further provide a model for many member of the Kasepuhan as to what life is to be pursued.

Media messages and conversations with 'outside experts' have led Kasepuhan to develop an awareness of possible hazards coming from outside forces which have to be dealt with, but which are created by actors beyond the control of their inner selves or community. Instead of being avoidable, they become unavoidable events, but nevertheless un-acceptable. The Kasepuhan case can be seen as an inside-out shift: the greater risks are moving from within to without. There is already some evidence that when greater risk and the ability to

control it are considered, and both are located more distantly from self and community, people come to rely more on individual strategies, such as in the case of village security, for example during a **serah taun** ceremony (chapter seven), and when involvement with outside actors is intensified, increasing the range of options to fulfil their needs, dependency on local arrangements is reduced, such we have seen in the case the social organisations of the rice **kepakan** (chapter six). For those Kasepuhan with less land to farm, practicing **huma** just as **sarat supaya sah** (a ritual necessity) is seen increasingly as a risk they cannot avoid to take.

Kasepuhan perception of risk causation is changing from a position in which misfortune is perceived as being due to the negative actions of specific persons who can be socially identified, to one in which the social origins are perceived to be located in the collective behaviour of entire populations of people. This is reminiscent of the shift from insider to outsider explanations of misfortune discussed in more general terms by Mary Douglas (1970). The cause of risk remains anthropogenic here, but it has shifted from the specific – individual moral actors - to the general - groups of a-moral actors (e.g. miners). The contacts which Kasepuhan have built with outside agencies and easier access to information through radio, television and, to a lesser extent, newspapers, are partly the reason behind this change in the perception of risk causation.

Increasingly Kasepuhan perception of risk and fears of misfortune are not based on their direct experience (as, for example, in the many agricultural failures), but rather run counter to their own intuitive and experiential evidence, in the light of information they have obtained through the media and rumour. This is the case with mercury poisoning. To some extent, they legitimate reliance on such sources of information by claiming that the situation is different nowadays from what it was in former times. Individuals responsible for causing misfortune as well as those affected by it are more widely distributed, the causes and consequences more diffuse. It is difficult to recognise and designate responsibility where many people are involved, not only Kasepuhan. In such a situation, Kasepuhan themselves tend to conclude that they alone do not have the power to control other people, non-Kasepuhan, who are part of the problem. Furthermore, they note that though they personally may not be involved, for example, in gold mining, they may, nevertheless, suffer the consequences, the likelihood of mercury poisoning not being limited to the 'wrongdoers' i.e. the miners alone, but that these effects also spread to the Kasepuhan.

8.4 Epilogue

There remain only two communities of swidden farmers in South West Java: Kasepuhan in the uplands of Mt. Halimun, West Java, and Baduy on Mt. Kendeng, South Banten. The Kasepuhan have opted for cooperation with the outside world, while the Baduy remain closed. They present an interesting comparison. They present contrasting strategies – exclusion and compromise – each having their strengths and weaknesses in terms of ensuring cultural survival and managing day-to-day material risks.

Kasepuhan practice is an example par exellence of environmental management through 'self-regulation', which from the perspective of Nash and Ehrenfeld (1997), is increasingly superseding 'command and control' regulation. Kasepuhan crop diversity and fallow practices are not the result of any 'command' by the Sesepuh Girang alone, and neither is the non-use of pesticides. Rather the decisions emerge through mutual consultation and understanding of more general customs. Future planting strategies can be said to be the result of Karuhun messages, but the senior rank elders, village elders, and ordinary members, freely discuss these issues amongst themselves. Kasepuhan approaches, therefore, contrast with Indonesian government policy generally over the last 32 years of the New Order, where environmental management was theoretically based on the central command-and-control principle that required a centralised law enforcement apparatus.

There have been many attempts recently to conceptualise risk in its social and cultural context. There is the concept of 'risk society' (Beck 1992), and 'reflexive modernisation' from Beck and Giddens (1994). Risk notions, however, are not the preserve of modernity, and making a hard and fast distinction between modern and traditional forms of risk management can sometimes be dangerous. By contrast, Douglas (1966, 1970, 1992) and Wildavsky (1991) see risk as a problem in the cultural constructions of knowledge. In this study I have shown that knowledge may change as a society is exposed to new ideas and practices. In the case of Kasepuhan, the degree of confidence they have in their own ability to control the future is beginning to re-define risk. These changes are summarised in table 8.1.

Table 8.1 A model summarising rationalities and conceptions of risk and its management in 'traditional' Kasepuhan and the shift toward a 'modern' worldview.

	'Traditional'	'Modern'
1.	Risk conceptualised qualitatively	Risk conceptualised quantitatively
2.	Concept of 'a risk' weakly articulated	Concept of 'a risk' strongly articulated
3.	Risk ranging from certainty to some	Risk is the probability of uncertainty
	degree of uncertainty	
4.	Risk, uncertainty and misfortune conflated	Risk, uncertainty and misfortune
		conceptually separate
5.	Causes of misfortune are endogenous	Causes of misfortune are increasingly
		exogenous
6.	Causes operate within the parameters of	Causes are not pre-destined
	what is cosmologically inevitable	
7.	Misfortune is not morally neutral	Misfortune is morally neutral
8.	Symbolic and material causation intertwined	Symbolic and material causation
		separate
9.		
	Uncertainty can be managed through	Uncertainty weakly managed through
	Uncertainty can be managed through self-control	Uncertainty weakly managed through self control
	self-control	self control
	self-control Risk avoidance is controlled by	self control Avoidance is controlled by a larger
10.	self-control Risk avoidance is controlled by community sanction i.e. the responsibility	self control Avoidance is controlled by a larger social association i.e. responsibility
10.	self-control Risk avoidance is controlled by community sanction i.e. the responsibility of the community	self control Avoidance is controlled by a larger social association i.e. responsibility is taken individually
10. 11.	self-control Risk avoidance is controlled by community sanction i.e. the responsibility of the community Risk management through optimisation	self control Avoidance is controlled by a larger social association i.e. responsibility is taken individually Risk management through
10. 11.	self-control Risk avoidance is controlled by community sanction i.e. the responsibility of the community Risk management through optimisation and diversification strategies	self control Avoidance is controlled by a larger social association i.e. responsibility is taken individually Risk management through maximisation and specialisation
10.11.12.	self-control Risk avoidance is controlled by community sanction i.e. the responsibility of the community Risk management through optimisation and diversification strategies Situated in conceptions of nature in which	self control Avoidance is controlled by a larger social association i.e. responsibility is taken individually Risk management through maximisation and specialisation Situated in conceptions of the world

Appendix 1

Useful plants found in Kasepuhan **talun** (orchards) in Ciptarasa (Adapted from UPT. INRIK-UNPAD 1995)

No	Kasepuhan names	Scientific names	Used for
1	cengkéh	Syzygium aromaticum	cigarettes medicine
2	randu	Ceiba pentandra	medicine
3	cau	Musa sp	food vegetable food wrapper
4	peuteuy	Parkia speciosa	vegetable
5	jéngkol	Archidendron jiringa	vegetable
6	kalapa	Cocos nucifera	vegetable
7	nangka	Artocarpus heterophyllus	food
8	kiray	Metroxylon sagu	house roof
9	ganas	Ananas comosus	food
10	turubuk	Sccharum edule	vegetable
11	jambé	Areca catechu	medicine
12	jambu aér	Eugenia javanica	food
13	lamé	Alstonia scholaris	medicine
14	awi	Bambusa sp.	building structures home appliances wrapper
15	kadu	Durio zibethinus	food
16	kopi	Coffea canephora	food

Appendix 2
Useful plants in Kasepuhan **kebon** (gardens) in Ciptarasa (Adapted from UPT-INRIK 1995)

No	Kasepuhan names	Scientific names	Used for
1	bonténg	Cucumis sativus	vegetable
2	tomat	Lycopersicon esculentum	vegetable
3	cabé	Capsicum annuum	vegetable
4	takokak	Solanum torvum	vegetable
5	jaat	Psophocarpus tetragonolobus	vegetable
6	bayem	Amaranthus hybridus	vegetable
7	cau	Musa sp.	vegetable
8	kalapa	Cocos nucifera	vegetable building material food wrapper
9	peuteuy	Parkia speciosa	vegetable
10	turubuk	Sccharum edule	vegetable
11	sampeu	Manihot esculenta	vegetable food
12	kawung	Arenga pinnata	sugar cigarette paper roof
13	boléd	Ipomoea batatas	food
14	seureuh	Piper betle	medicine
15	séréh	Cymbopogon nardus	vegetable
16	panglay	Zingiber montanum	vegetable medicine
17	honjé	Nicolai speciosa	vegetable

No	Kasepuhan names	Scientific names	Used for
18	laja	Languas galanga	vegetable
19	cikur	Kaempferia galanga	medicine
20	kacang panjang	Vigna sinensis	vegetable
21	hiris	Cajanus indicus	vegetable
22	taleus	Colocasia esculenta	food
23	surawung	Ocimum basilicum	vegetable medicine
24	awi	Bambusa sp.	vegetable building materials home appliances craft rope
25	hanjuang	Cordyline fruticosa	medicine
26	alpuket	Persea americana	food
27	kumis ucing	Orthosiphon aristatus	medicine
28	kembang eros	Rosa hybrida	decorative plant
29	balingbing wuluh	Averrhoa bilimbi	food medicine
30	jahé	Zingiber officinale	vegetable medicine
31	konéng	Amomum curcuma	vegetable medicine
32	bawang	Allium cepa	vegetable medicine
33	saledri	Apium graveolens	vegetable medicine

No	Name	Species	Used for
34	paria	Momordica charantia	vegetable medicine
35	srangenge	Tithonia diversifolia	decorative plant
36	céngék	Capsicum pubescens	vegetable
37	cengkéh	Syzygium aromaticum	medicine cigarette
38	tiwu	Secharum officinarum	medicine
39	waluh	Cucurbita moschata	vegetable
40	handeuleum	Graptophyllum pictum	medicine
41	awi konéng	Bambusa vulgaris	decorative plant
42	kacapiring	Gardenia jasminoides	decorative plant
43	dahlia	Dahlia rosea Cav	decorative plant
44	suuk	Arachis hypogaea	vegetable

Table 6.1

Kasepuhan landraces recorded up to 1997 (listed alphabetically; bold indicates **buhun** (an ancient) landrace)
(Source: Budi 1997)

No	landrace names		present in		elevation	
		sawah	huma	are/	sedengan/	leuir/
				low	medium	high
1	Angsana	v		\mathbf{v}		
2	Bagoan		v		V	
3	Bandung	v				v
4	Bangban		v	v		
5	Banteng		v			v
6	Baok		v	v		v
7	Belut	v			v	v
8	Beureum Batu		v			v
9	Beureum Beunying	v				v
10	Beureum Dadapan		v			v
11	Beureum Gede	v			v	
12	Beureum Geulis		v			\mathbf{v}
13	Beureum Karang		v			v
14	Beureum Keris		v		v	
15	Beureum Kui	v	net	v	,	
16	Beureum Peuteuy		v		v	
17	Beureum Seungkeu		v		v	
18	Bunar		v		,	v
19	Cangkudu		v			v
20	Canor	v	· ·	***		V
21	Cere Abah			V	***	
22	Cere Abali	V		V	v	
23	Cere Anali Cere Aok	v		V	V	V
		v		V	Ÿ	
24	Cere Apel	v		V	:	
25	Cere Batu	v		V		
26	Cere Beureum	v		V		
27	Cere Beureum Pondok	v		v		
28	Cere Demul	v		V		
29	Cere Gebang	v				V
30	Cere Gelas	v		V	v	
31	Cere Gemek	v			v	v
32	Cere Gombal	v		v	v	
33	Cere Hanjuan	v		v	v	
34	Cere Hoe	v		v	v	
35	Cere Kalapa	v		V	v	
36	Cere Jaer	v		v	v	
37	Cere Jambe	v		v	v	
38	Cere Jenah	v		v	v	
39	Cere Kawat	v		v	v	
40	Cere Kiara	v		v	v	
41	Cere Layung	v		v	v	
42	Cere Limas	v		v	v	
43	Cere Malati	v		v	v	
44	Cere Mantare	v		v	v	
45	Cere Marilen	v		v	v	
46	Cere Markoti	v		v	v	

No	landrace names	present in sawah	present in huma	are/low	elevation sedengan/ medium	leuir/high
47	Cere Moniar	v		v	v	
48	Cere Pager	v		v	v	
49	Cere Raja Sikep	v		v	v	
50	Cere Ramaga	v		v	v	
51	Cere Sugih	v		v	v	
52	Cere Tambaga	v		v	v	
53	Cere Walet	v		v	v	
54	Cinde	v		v	v	
55	Denok	v		v	V	
56	Dirah		v	v	v	
57	DT	v	i i	v	v	
58	Gadog	,	v	v	v	
59	Gajah Bairah	v	•	v	V	
60	Gajah Beuneur	v		v	v	
61	Ganala	v		v	v	
62	Gandreng	'	v	v	v	
63	Ganggarangan	v	v		**	
64		1		v	V	
65	Gantang	V		v		
	Gebang	v			V	V
66	Hapit	v		V	V	
67	Hawara Beunteur	v	v	V	V	V
68	Hawara Beureum		v	v	V	
69	Hawara Huma		v	v	V	V
70	Hawara Jenggi	v		v	V	v
71	Hawara Leneng		v	v		
72	Hoe Bulu		v	v	V	
73	Hurip	v		v	V	
74	Jambe	v		v	\mathbf{v}	
75	Jambu	v		v	\mathbf{v}	
76	Jamudin	v			\mathbf{v}	v
77	Jidah	v		v	v	v
78	Kadut	v		v	v	v
79	Kewal Beureum	v		v	v	v
80	Kewal Bodas	V		v	\mathbf{v}	
81	Koropak	v		v	\mathbf{v}	
82	Layar	v		v	V	
83	Layung Kuning	v			v	v
84	Layung Sari	v		v	v	
85	Limar		v	v	v	
86	Manglar	v		v	v	
87	Manggu	v		v	v	
88	Manjora	,	v	v	v	
89	Maringgeuy		v	v	V	
90	Mayang Sari		v	v	V	
91	Menteng	v	3₩0	v	V	
92	Menur	v		v	V	
93	Nani	v		v	V	
94	Nemol	v		v	V	
95	Pandan Wangi	V	37	v		
95 96	Pelita		V		V	
		v		V	V	
100	Raja Denok	v		V	V	
101	Raja Sana		v	V	V	
102	Raja Wesi	V		v	V	

No	landrace names		present in		elevation	
		sawah	huma	are/	sedengan/	leuir/
				low	medium	high
103	Ranji	v		v		
104	Rante Emas	v			v	
105	Renong	v		\mathbf{v}	v	v
106	Rere	v		v	v	
107	Resik	v		v	v	
108	Rogol Beureum	v		v	v	
109	Rogol Bodas	v		\mathbf{v}	v	
110	Salak	v		\mathbf{v}	v	v
111	Sero		v	v	v	v
112	Sisit Naga	v		v	v	
113	Songleng	v		v	v	
114	Srikuning	v		v	v	
115	Srimahi	v		v	v	
116	Srimanggala	v		v	V	
117	Sunli	v		v	v	v
118	Tambleg	v			v	v
119	Tampeuy	v		v	V	v
120	Tampeuy Hideung	v		v	V	v
121	Tampeuy Koneng	v		v	V	v
122	Tampeuy Perak	v		v	v	v
123	Terong	v		v	V	1.65
124	Terong Beureum	v		v	v	
125	terong Bodas	v		v	v	
126	Umpay Lutung	v			V	v
127	Wirun	v		v	V	
128	Ketan Alean	v		v	v	v
129	Ketan Beledug	v		v	v	
130	Ketan Beureum	v			v	v
131	Ketan Bodas	v		v	v	
132	Ketan Bogor	v		v	v	v
133	Ketan Bungsu	1 '	v	v	v	
134	Ketan Cikur	v		v	v	v
135	Ketan Hideung	v		v	v	v
136	Ketan Hideung Bulu	v		v	v	v
137	Ketan Huis	v		v	v	
138	Ketan Keuyeup	v		v	v	
139	Ketan Kidang		v	v	v	
140	Ketan Langgasari	v		v	v	
141	Ketan Lepo	v		v	V	
142	Ketan Nangka		v	v	v	
143	Ketan Putri	v		v	v	
144	Ketan Ruyung	,	v	v	v	
145	Ketan Samarang		v	v	v	v
146	Ketan Uncal		v	v	v	
					<i>J.</i>	

Table 6.2 Landraces collected in the Kasepuhan area in 1999 (bold indicates **buhun** (an ancient) landraces; italics indicates names not listed in table 6.1)

	Landrace names	present in	present in	Sampling	Sampling	Notes
		sawah	huma	Location	Date	
1 2 3 4 5 6	Bangban Beureum Geulis Beureum Karang Gadog Maringgeuy Jamudin	v	v v v v	Ciptarasa	05-Mar	
7	Raja Denok		V	Cicemet	12-Apr	Hard stalk which
	Gajah Panjang		v	Cisarua	15-Apr	makes harvesting easier. Stalk ordered in rows, straight and smooth, but
	Gajah Bairah		V	Cianghangsa	07-Apr	higher than shoulder height
8 9	Leuir Loyor Pacing	v	V	Ciptarasa Ciptarasa	05-Mar 04-Apr	
10	Cere Batu	v				Stalk of Cere in general is tender
11	Cere Beureum	v				but pliable therefore the cutting
12	Cere Gelas	v				movement must involve pulling.
13	Cere Kiara	V				Grain of Gelas is easily shed. Stalk of Kiara is lower than
14	Cere Layung	V				shoulder height which makes
15	Cere Markoti	v				harvesting tarahal (easily tire). Stalk of Markoti is soft, easily damaged by wind.
16 17 18	Jidah Nani Nemol	v v v		Ciptarasa Ciptarasa	02-Apr 02-Apr	damaged by wind.

	Landraces names	Present in sawah	Present in huma	Sampling location	Sampling location	Notes
		Sawan	IIullia	iocation	юсацоп	
19	Srikuning	v		Ciptarasa	02-Apr	Hard stalk which makes the same height as shoulder, ordered in rows, straight and smooth. In general it represents the easiest type to cut. Jambu and Angsana are also falling in this category.
20	Terong Bodas	v		Ciptarasa	02-Apr	
21	Ketan Cikur	v		Ciptarasa	02-Apr	Stalk of most Ketan type
22	Ketan Hideung	v		Cisarua	11-Apr	is similat to Cere character,
		v		Cicemet	13-Apr	tender but pliable which needs to be
23	Ketan Ulam	v		Cisarua Cicemet	11-Apr	pulled
24	Ketan Nangka	v				
25	Ketan Lepo	v		Cisarua	08-Apr	
26	Ketan Beureum	v		Cisarua	11-Apr	
27	Ketan Bogor	v		Cibadak	12-Apr	
		v		Cikaret	13-Apr	
28	Ketan Mujair	v		Cisarua	15-Apr	
29	Ketan Rante	v		Legok	16-Apr	
30	Ketan Alean	v		Cikaret	13-Apr	
31	Ketan Ruyung	v		Cikaret	13-Apr	
32	Terong Beureum	v v		Cisarua Ciptarasa	11-Apr 02-Apr	
33	Jambu		\mathbf{v}	12.00		
34	Leuir Badigal		\mathbf{v}	Ciptarasa	05-Mar	
35	DT	v		Cisarua	08-Apr	
36	Pelita	v		0:		
37	Angsana	v		Cisarua	11-Apr	
38	Tampeuy Koneng	v		Cisarua	11-Apr	Most Tampeuy in general
39	Tampeuy Perak	v		Cibadak,	12-Apr	have stalk that higher than
		v		Cicemet		shoulder height, tarahal

	Landrace names	Present in	Present in	Sampling	Sampling	Notes
		sawah	huma	location	location	
40	Tampeuy Hideung	v		Ciptarasa	04-Apr	(easy getting tire) when
	Sero	v v		Cikaret, Cicemet	13-Apr	harvesting
41	Sunli	v v		Cikaret, Cicemet	13-Apr	
42	Gebang	v		Cikaret	13-Apr	
43	Peteuy Hideung	v				
44	Sisit Naga		v	Legok	16-Apr	
45	Resik	v				
46	Bandung	v				
47	Rogol	v				
48	Kewal Bodas	v				
49	Kewal Beureum	v				
50	Maliwarna	v				

Glossary 1 Conversion of scientific to Kasepuhan names (ref: Heyne (1950), Hoogerwerf (1949a,b, 1970), the Direktorat Bina Kawasan Pelestarian Alam (1994), and Plant Resources of South-East Asia (PROSEA).

Plants

Agathis sp. damar

Alstonia scholaris lamé

Alstonia villosa ki liat

Altingia excelsa rasamala

Ananas comosus ganas

Annona muricata nangka walanda

Annona squamosa manoa

Aporosa frutescens sasah

Aquilaria spp. gaharu

Artocarpus heterophyllus nangka

Artocarpus integer campedak

Averrhoa carambola balimbing

Bouea macrophylla gandaria

Bridelia stipularis kanyéré

Cajunus indicus hiris

Calamus viminalis howé leuleus

Capsicum pubescens céngék

Carica papaya gedang

Cinnamomum nitidun ki téja

Citrus aurantiifolia jeruk nipis

Citrullus vulgaris samangka

Cocos nucifera kalapa

Coffea arabica kopi

Coix lacryma-jobi hanjeli

Coleus atropurpureus jawér kotok

Costus sp. pacing

Cucumis sativus bonténg

Cucurbita moschata waluh

Dacrycarpus imbricatus jamuju

Daemonorops melanochaetes séél

Daemonorops rubra térétés

Dendrocalamus asper awi bitung

Diplazium esculentum papakisan

Dipterocarpus hasseltii palahlar

Durio zibethinus kadu

Erechtites valeriannifolia sintrong

Erythrina sp. dadap

Etlingera littoralis tepus

Eugenia corymbifera ki sireum

Eugenia javanica jambu aér

Eupatorium pallescens babanjaran

Eurya acuminata ki hiris

Ficus sagittata darangdan

Gigantochloa apus awi tali

Gigantochloa pseudo-arundinacea awi gombong

Gigantochloa atroviolacea awi hideung Psophocarpus tetragonolobus jaat

Graptophyllum pictum handeuleum Ptychosperma kuhlii reundeu

Imperata cylindrica eurih Punica granatum dalima

Korthalsia laciniosa howé sampay Quercus costata pasang tangogo

Lantana camara saliara Schima wallichii puspa

Laportea stimulans pulus Sesamum orientale wijén

Leea sambucina sulangkar Solanun melongena térong

Mallotus paniculatus calik angin Spilanthes acmella jotang

Mangifera indica mangga Staurogyne elongata reundeu diuk

Mangifera odorata limus Swietenia mahagoni mahoni

Manihot esculenta sampeu Syzygium aromaticum cengkéh

Melastoma malabathricum haréndong Zingiber montanum panglay

Metroxylon sagu kiray

Michelia montana manglid

Morinda citrifolia cangkudu Animals

Nicolai speciosa honjé Cuon alpinus ajag

Ocimum basilicum **surawung** Felis Bengalensis **ucing leuweung**

Orophea hexandra sauheun Galis galis cangehgar

Pandanus pandan Hylobates moloch oa

Pangium edule picung

Lonchura leucogastroides piit

Passiflora edulis markisa Muntiacus Muntjak mencek

Persea americana alpuket Presbytes comata surili

Pilea glaberrima pohpohan Panthera pardus macan

Pinus merkusii camara Spizaetus bartelsi heulang

Podocarpus blumei ki maléla Sus scrofa jodog

Pogonatherum paniceum palias Tyto alba koréak

Trachypithecus auratus lutung

Tragulus kanchil peucang

Otus lempiji bueuk

Glossary 2

English terms for Kasepuhan parts of the house

Bamboo matting palupuh

Bamboo rack hanging on the wall above the stove para seuneu

Bathroom jamban

Clay taneuh porang

Clay which supports stove parako

Corrugated iron séng

Enclosed space above kitchen (kind of loft) functions as a storage room mainly for garden products **para**

Door panto; front door panto hareup; side door panto pipir

Kitchen pawon

Living room tengah imah

Plaited bamboo bilik

Rattan matting lampit

Roofed open space in front of the house émpér

Room next to goah where pounded rice is stored padaringan

Sleeping room kamar

Space in between house and ground kolong

Space in the kitchen where women prepare rice goah

Stove hawu

Wooden bench ambén

balong pond Glossary 3 bancana undesired event caused by English translation of general human wrong doing, gara-gara Kasepuhan terms bangkawarah deviation from the teachings Α bantu help baraya family aa older brother baris row; Baris Kolot Indung the abah father seven assistants of Sesepuh Girang acis money with inherited titles adat customary laws, beliefs, rituals and barokah blessing practices batara-batari gods and goddesses ahli expert batara Guru god who teaches the ajag ijig ngablu hanging around, right path and sets the rules for chatting human conduct batara Wenang aki grandfather god which, in contrast to batara alam world, realm alam batin spiritual Guru, represents power and realm alam lahir physical realm authority, whose acts are without alam éling conscious world alam consideration to others batara Kala cicing silent non-moving world god of destruction who can only alam hirup moving world alam employ his power through a sangara fierce realm particular agreement with batara alu wooden pestles Guru aman secure teu aman not secure batu stone batu lawang stone door amben wooden bench batur other person amit step back amit amit very béar loose unwilling béas pounded rice amparan mat made of Pandan leaves bekel supply angker dangerous place béngkong a person who takes on angklung kind of musical instrument responsibility for circumcision antibiotik antibiotic rituals; one of the Baris Kolot anyar new nganyaran a ceremony for **Indung** having the specific title tasting new yield of rice Béngkong Kolot/Induk apes misfortune béntang star arca statue bérak fertiliser asli original beresih clean aseuk a length of wood sharpened at berkah blessing one end used to make a hole in soil beuneur good quality rice seed referred ngaseuk a ceremony performed prior to as being 'full' to planting rice beureum red bi: bibi aunt B biasa common; habitual; normal bilatung larvae babakan the second stage of settlement bilik plaited bamboo development which consists of binih seed bibinihan various seeds about three to five houses boboko bowl made of woven rattan babad story bodas white bahasa; basa language bahasa ngélmu buana world buana nyungcung upper scientific language world buana tengah middle world balebat dawn buana handap lower world baliung axe bubu fishing trap

bubur porridge
buhun ancient
bulé white skinned people
buligir barren, naked
bumi house; Bumi Ageung the sacred
house as the centre of Kasepuhan
central village which comprises the
Bumi Rakyat and the private
residence of Sesepuh Girang;
Bumi Rakyat community house
buruan a space in between a group of
houses
buyut forbidden

C

Calung kind of musical instrument
camara pine
carék vow
carita story carita-pantun a ritual story
or narration, alternated by singing
and accompanied by a zither
cau bananas cau goreng fried bananas
cengkéh clove
centong rice ladle
cepel sticky
ci water
cokrékan small pieces, branches of fuel
wood

D

dangdut a form of music used to accompany dancing dawegan young coconut daya power teu daya powerless debat argue debus a performance of physical invulnerability popular in the Banten area dédé younger brother derepan part of the kepakan which is given by matuh-batur to someone else deukeut near diaping tended digembos referring to the smelting of gold amalgam diinjeumkeun lend disalametkeun having been given a ritual blessing

diserahkeun been given away; in the case of divorce this means that the wife has been given back to her father.

disiangan to be fertilised
dituliskeun written
dogdog kind of drum instrument
dogdoglojor musical instrument
comprises of angklung and
dogdog

dukun ritual specialist dukun tani agricultural ritual specialistdumpingan rice plant which is planted along the edge of plot

E

éling aware kaéling awareness
élmu knowledgeable élmu
 kawedukan physically invulnerable
élmu buhun ancient knowledge
emak mother
émpér roofed open space to the front
of a house
éra shame tong ngérakeun to not
make a shameful situation teu boga
kaéra without shame, egotistical
étém a finger knife used to harvest rice
panicles
eurih Imperata grass

G

galengan dykes
gambar picture gambar hirup moving
picture e.g. as in television
gapléh domino card
gara-gara human behaviour which
causes an undesired event
gawé work gawé tani agricultural work
gebingan large pieces of fuel wood
gedé big gegedéan large scale
gelar referring to a modern title e.g. Pak
Guru.
gélo mad
géngsi prestige, status
geueuman a situation which promotes
a feeling of delight

girang upstream; Sesepuh Girang the title of the Kasepuhan leader goah a space in the kitchen used by women to prepare food, especially rice guru teacher gurundung a barrel used to spin gold ores in order that gold amalgam can be formed gusti god	jamban bathroom jambatan bridge; referring to a space between the Bumi Rakyat and the private residence of Sesepuh Girang jami land on which rice stubble is still found jangjawokan spell jarian a location for garbage disposal jaro village leader jaya good fortune
H hak right halal appropriate according to Islamic	jelas obvious jelema human jelema gélo a mad person jelema pinter a person who is able to predict or see into the future through his supernatural
custom halimun mist halodo dry usum halodo dry season hama pest	abilities jelema gedé/beunghar big/rich people jelema cukupan people of average wealth jelema leutik small/poor people
handap below, under haremis shellfish hasil result hayang will, wish, desire hawa air hawa goréng bad air	jero internal jero/luar internal/external jiarah visiting a sacred place jimat talisman jin a kind of supernatural creature jodog wild pig
hawara fast growing rice hawu stove helaran ceremony hencakan; titincakan steps	jorang erotic jurig ghost juru an actor; Juru Pantun a teller of carita- pantun; one of the seven
hideung black hujan rain hujan gedé heavy rain huma swidden cultivation	Baris Kolot Indung titled persons K
I	kabéh entirely sakabéhnakeun has an effect on an entire population
isin shy idin permission iket headress	kaburitan to arrive home after dark kacapé tiredness kacapi zither kadut zak
ilu follow ngilu to go along, participate impian dream indung mother; origin; Indung Beurang midwife; one of the seven	kaéling awareness kahayang willingness kala time
Baris Kolot Indung titles; indung pare mother rice injeum borrow	kaluar out kalér north kamanusaan humanness kamar sleeping room
J	kamerdekaan independence kampung a village, a settlement consisting of more than five houses
jaman era jaman baheula; jaman kuda ngégél beusi ancient	kampung gedé the final stage of

time jaman kiwari present time

settlement development; for Kasepuhan the central village kaneron bag made of woven rattan kangker referring to all fatal diseases kapinter jeung pangarti intelligent and full of understanding; not just bright in terms of mental ability but also being able to understand/wise kareseban menstruation karuhun those Kasepuhan ancestors who have died more than seven generations previously and who have therefore entered the upper spirit world kasar unrefined kasar pisan very unrefined/rude kasepuhan luar Kasepuhan people whose membership is not decided on the basis of descent katerusan precedence, out of control katurutan refers to two things that are suited to each other kawani courage kebon garden kembang flower kemit guard **kénca** left (in terms of direction) kepakan refers to part of rice planting over which matuh-batur have certain rights keris a kind of dagger ki; aki grandfather kidul south kira-kira approximately kiray plaited sago leaf kiwa right (in terms of direction) kolong a space under things, e.g. a space under the house or under the bed kolot old kokolot elders koloteun a character like an elder e.g. wise kompor cooker koréak barn owl korét mean kraton palace krismon monetary crisis kualat receive a curse kuasa able

kuat strength

kuéh cake, biscuit kukuéhan various

cakes and biscuits
kulon west
kuik mercury
kujang chopping knife
kuli worker
kuraés a kind of small ant
kopéah black hat
koréd a small hand held hoe
korsi chair
kotak square kotakan plot
kotor dirty ngotoran contaminating

L

lalab vegetables lalakon an episode in one's life lalaki men lampah behaviour lampah nu bener appropriate behaviour lampit rattan matting langit sky langsung direct lantayan bamboo rack used to dry bundles of rice lastari has passed; dead; grave lauk fish lauk asin salted fish lawan opposite lawang door layur fish paste lebak down lemes refined lemes pisan very refined lelemes invisible creatures leuir slow growing rice leuit rice barn leuit Si Jimat communal leuweung forest leuweung titipan entrusted forest leuweung geledegan primary forest leuweung sempalan open forest leuwih more leuwih deukeut closer liar wondering/hanging about lieur confuse lingkaran border lingkaran luar external border lisung pounding morter liliuran direct reciprocal exchange of labour luar external luas open minded luhur up lumpuh paralised

M

macul hoeing the soil naptu unique attributes mabay the act of selecting rice plants nangtayungan protecting magar fencing magar pakaya fencing ngabagi sharing ngabajak ploughing the pests mang; emang uncle ngaberesihan cleaning mangbulan months ngabonceng ojék sit on the back of manusa human manusa leuweung rented motor cycle forest human/people ngabuat harvesting maro working arrangement i.e. ngadiukkeun to sit in half/half; half of the yield goes the ngagaduhan owned by owner and the other half goes to the ngagaru harrowing worker ngagebyar full of light ngahiras working on adat land; work masa period masarakat society masarakat adat without return payment traditional society conforming to ngahuap putting something into the adat/custom mouth ngahuap naga go in the matih very powerful direction of the dragon mouth (not matuh long term relationship matuh an auspicious direction) batur other households which have ngahuma practicing huma a matuh relationship with land ngahyang evaporated ngajiwa census owner whereby certain rights are established **ngakeul** turning the cooked rice to make it smooth and mellow maung tiger ngalangkangan cast a shadow mayoran ceremony medarkeun opening up medarkeun **ngampar** sitting on the floor carita opening up the story **nganglér** levelling the soil nganyaran tasting a newly harvested medit mean mega male ngaping tending animals (or humans) méja table melar stretch ngapung flying melenghir airy melenghir seungit ngarambas second weeding pleasant smell in air ngarasa felt **ménak** nobility; aristocracy ngaréngkong transporting méncrang sparky ngaseuk ceremony initiating mérang itching rice planting mésér buy ngawangkong chat merenah comfortable ngawih sing a song mesin machine mesin ngapung ngawuh known ngembang a ritual pilgrimage to the airplane mipit ceremony to initiate harvesting graves of former Sesepuh Girang mudun go down up to the seventh generation mulangkeun as a return ngérakeun ashamed musawarah discussion ngeusi full **ngilu** to go along; participate nginjeum borrow ngopi drink coffee ngora young ngoréd weeding

N

ngotoran contaminating pakidulan southern ngudut smoking pakuwon palace ngurén coupling palupuh bamboo matting ni; nini grandmother pamakayan agricultural ritual specialist nu which nu kedah which has to Pamakayan Induk one of the happen (destiny) nu ngagaduhan Baris Kolot Indung titles which owned pamali forbidden nyacar clearing a rice field in panas hot, a situation of unrest or preparation for planting discomfort nyambuang smell of nyambuang panengah middle bacin smell of corpse pancer centre pancer-papadon a nverahkeun surrender nverahkeun situation whereby every element is manéh surrender themselves connected in an interdependent nyarengan accompany relation nyeplos pass through panengah in the middle nyiarkeun published pancuran a common public water nyolong stealing nyolong jelema source, bamboo conduits which tap stealing humans water from the river pangarti understanding/awareness O panghulu a wedding ritual specialist; Panghulu Induk one of the Baris Kolot Indung titles obat medicine pangkuan lap ojég rented motorcycle pangsi traditional sundanese cloth opat belasna a ceremony that takes pangurus a carer pangurus leuit jeung place on the fourteenth day of each pusaka carer of the Si Jimat barn month when the moon is full and heirlooms, the duty of the oray snake oray taneuh soil snake Urusan Jero of the Baris Kolot otak brain Indung panjaga guard; Panjaga Leuit a person P who monitors and takes record of the **Si Jimat** barn rice stock. pa/pang a person who works on panjang long panjang lengkah long something or a place step, but also refers to someone who pahuma a farmer huma; performs more external activities panggérék a hinderer; panyadap a panto door panto hareup front door tapper; padagang a trader; panto pipir side door panyawah a farmer of wet rice land panyakit disease pacul hoe panyambung contribution padagang kaliling itinerant merchants papadon the four sides of padaringan an area of the kitchen interdependent relationship (e.g. used as a place to store pounded corners of squares) which act as a rice; it is restricted for women. balancing power pagar fence; Pagar Pakaya/Tukang parako a borderline paparakoan four Tinggar one of the Baris Kolot sided base of a stove made of clay; it **Indung** titles with responsibility to is also refers to the four sided protect rice by erecting a spiritual border of the pupuhunan. fence around rice plants papirak divorce paharé-haré indifferent para loft para seuneu bamboo rack pakemitan building at the back of the above the stove used to dry Bumi Ageung used as a guard agricultural products and seeds

house and storage space

paré un-pounded rice paré anyar refers	rejeki luck, fortune, wealth rejeki
to HYV varieties of rice	nyeplos not having luck
pasi chip of wood	resmi legitimate
patik adze	reuma land with weedy and shrubby
patugas officer	underbrush
pawang a person who has the ability to	rujak fruit salad
negotiate with a supernatural power	runtah rubbish
e.g. to prevent rain	
pawon kitchen	S
pejuh sperm	č
penasehat adviser	sa one, single sawindu eight years
pendatang immigrants	sapamikiran; sauyunan having the
pengusaha businessman	same thought or aim
penting important	e
perbawa character	sadap tapping sah valid
percaya trust	
peti box	sajarah cyclical character of alam
	sakabéhnakeun entirely
pilih select teu pilih-pilih non-selective	sakadang kind of animal sakadang
pinter clever	peucang a mouse deer
pocong bundle of rice panicles	sakit ill
weighing approximately four	sakola school
kilograms	sakti spiritually powerful
poé day	sakurén; salikur a couple
pohaci female	salametan a ritual to achieve a state of
ponggokan two week period of	well-being
prohibition on working the soil	salikur; sakurén see above sakurén
pribadi personal	salingkungan restricted
pribumi host	samagaha lunar/solar eclipse
pulen a taste of rice that is described as	sandékala dusk
smooth and mellow	sangit dangerous
punten excuse me	sarakah greedy
pupuh the rhythms of pantun	sarapan breakfast
pupuhunan a ritual centre in a huma	sarasehan seminar
field used as a point to start and	sarat ritually necessary
finish the harvesting activity	sarung sarong
	satanggungan a weight carried on a
R	person's shoulder
	saung small hut in rice field saung
radén traditional title acquired through	lisung small house for a rice
descent	pounding morter
raksésa giant	sauyunan; sapamikiran see above sa
ramé noisy; is used also to refer to a	sawah wet rice agriculture sawah
busy environment	tampian dalém grave of the
rangu crispy	nobility
rarangan private bodily parts rarangan	sawindu eight years sawindu alam
awéwé vagina	sangara eight years of the fierce
rasa feeling rasa éra feeling of shame	realm
rasa manunggal feeling of oneness	sémah guest
ngarasa to feel	sembah greeting to a king
	semprotan pesticide
	séng corrugated iron

sepuh old; **Sesepuh Girang** the title of Kasepuhan leader; Sesepuh Kampung the title of village leader serah hand over, surrender nyerahkeun manéh surrendering themselves serah taun thanksgiving ceremony seserahan things that have been received through serah e.g. land seungit pleasant smell seuri smile seuri konéng a bashful sibuk busy siling; silih one another; each other siling bantu to help each other siloka a symbolic narration which is believed to describe the future siluman an evil supernatural spirit/creature sisingaan lion like sisirangan unmatched pair of things e.g. shoes that are of different colours between right and left sirna disappeared sisingaan lion like soré afternoon suci purified suluh fuel wood sunda the people and geographical area of West Java; Sunda Wiwitan old Sundanese religion

T

talun orchard

talungkub lying prostate taneuh soil taneuh porang clay tangkal tree tangkulak middle men tani agriculture tapa ascetic exercise tapak print; trace tatapakan imprint; refers to the stones at the base of the house stilt tatabeuhan orchestra tatali tied up; Tatali Paranti Karuhun Kasepuhan's guidelines for life given by the Karuhun taun year tebar rice planting in sawah teu not teu beuneur poor quality rice seed teu boga kaéra without shame

teu biasa not normal teu pilihpilih non-selective teu boga rasa to not have a feeling teu daya not having power teu aman not secure teu nomi not based on economic calculation teu cangkeul not tiresome teu nyana teu kaduga unexpected and uncontrollable tengah middle tengah imah living room tengah poé midday tengah peuting midnight tenang calm katenangan composure tenung sorcery terah lines of household descent ti huma turun ka sawah from huma down to sawah (a description which put huma above sawah) tong do not tong ngérakeun do not make a shame situation tonggoh up (position) tradisi tradition tukang a person qualified for a particular work; tukang bangunan a builder; tukang kemit a person who has responsibility for the Pakemitan; tukang tinggar person who has responsibility to protect rice, pest chaser; Tukang Tinggar one of the Baris Kolot Indung titles; tukang urus sasatoan animal carer tunggang ride on tunggang gunung ride on mountain e.g. at a time of dusk when the sun is rested on mountain ridge turunan descent turunan kolot older in terms of line of descent tutuguan monument like tutumpakan float tutunggulan the activity of women who while pounding rice hit the side of the morter to produce a

U

ubar cure
ucing cat ucing-ucingan chase and
hide
udara air
uga; usum; mangsa season, the

distinctive musical sound

time, era usum halodo dry season ugana reached its own time (destiny) umbulan a settlement of between one and three houses umpi household umum public undak-undakan staircase urang human, we urang Sunda Sundanese urang Jawa Javanese urang dayeuh city people urang ulah jadi batur do not let us become like others urusan affair; Urusan Jero internal affairs officer of the Baris Kolot Indung usum era, period of time usum tanam planting season usum halodo dry season usum tani agricultural season

W

wadal things to sacrifice
wana welcome
wani companionship
wangsit divine message, revelation,
described in terms of uga
warga members
warung small/local shop
wayang shadow puppets wayang
golek Sundanese wayang differing
from Javanese wayang in terms of
the characters and form of the
puppets
wenang power, authority of batara
Wenang
windu eight years

Abbreviations and Acronyms

Angkatan Bersenjata Republik Indonesia (Indonesian Army) **ABRI** AMAN

Aliansi Masyarakat Adat Indonesia (Indonesian Adat Community

Alliance)

AMDAL Analisa Dampak Lingkungan (Environmental Impact

Assessment)

ASEAN Association of South East Asian Nations

BAPEDAL Badan Pengendalian Dampak Lingkungan (Environmental

Impact Control Agency)

BAPEDAL at the regional level **BAPEDALDA**

Badan Perencanaan Pembangunan Nasional (National **BAPENAS**

Development Planning agency)

BCN Biodiversity Conservation Network

BIMAS Bimbingan Massal (mass guidance on HYVs)

Bagian Kesatuan Pemangku Hutan, PERHUTANI at the **BKPH**

kecamatan level

BPS Biro Pusat Statistik (Central Bureau of Statistics)

BScS Biological Science Club

Balai Taman Nasional Gunung Halimun (the management of **BTNGH**

Mount Halimun National Park)

CIFOR Center for International Forestry Research

DEPHUT Departemen Kehutanan (Department for Forestry) Dewan Perwakilan Rakyat (The House of People's **DPR**

Representatives)

DTE Down to Earth

Golongan Karya (the New Order party). **GOLKAR**

HPH Hak Pengusahaan Hutan (Forest Concession, Forest Exploitation

Rights)

HGU Hak Guna Usaha (Use of Rights)

INMAS Intensifikasi Massal (mass intensification of HYVs)

INRIK Indonesian Resource Centre for Indigenous Knowledge –

Padjadjaran University

IPEDA Iuran Pembangunan Daerah (local government tax)

IRRI International Rice Research Institute

International Union for the Conservation of Nature **IUCN**

JICA Japan International Cooperation Agency

KEHATI Keanekaragaman Hayati (National Biodiversity foundation)

Keputusan Presiden (Presidential Decree) KEPPRES

KK Kontrak Karya (Leasehold)

Korupsi, Kolusi dan Nepotisme (corruption, collusion and KKN

nepotism)

ΚP Kuasa Pertambangan (Mining Licence) KPH Kesatuan Pemangku Hutan, PERHUTANI at the kabupaten

level. KPH Sukabumi, Bogor and Serang administration of

Halimun

KPPETNGH The Consortium of Eco-tourism Development in the Mount

Halimun National Park

KSDA Konservasi Sumber Daya Alam, PHPA at the province level
KTI Kawasan Timur Indonesia (eastern part of Indonesia)
KTP kartu Tanda Penduduk (residency card identity)
KUD Koperasi Unit Desa (cooperative at the village level)

LEAD Leiden Ethnosystems and Development Programme, Leiden

University

LIPI Lembaga Ilmu Pengetahuan Indonesia (Indonesian Institute of

Science)

LSAM Lembaga Studi and Advokasi Masyarakat (institute of community

study and advocacy)

LSM Lembaga Swadaya Masyarakat (independent community

organisation, widely known as NGO).

MPR Majelis Permusyawaratan Rakyat (The People's Consultative

Assembly)

NGO Non-Governmental Organisation

PERHUTANI Perusahaan Umum Perhutanan Nasional (a state owned

plantation company)

PETI Penambangan Emas Tanpa Ijin (illegal gold mining)
PHPA Perlindungan Hutan dan Pelestarian Alam, Departemen

Kehutanan (Forest Protection and Nature Conservation Bureau

of the Ministry of Forestry)

PSL Pusat Studi Lingkungan (Center for Environmental Study)
PT. ANTAM PT. Aneka Tambang (a state owned mining company)
PUSARPEDAL Pusat Sarana Pengendalian Dampak Lingkungan (centre for

environmental impact control)

PUSKESMAS Pusat Kesehatan Masyarakat (health extension services)

RePPProT Regional Physical Planning Programme for Transmigration

RT Rukun Tetangga (the lowest level of neighbourhood association)

SD Sekolah Dasar (primary school)

SMP Sekolah Menengah Pertama (secondary school)

TNGH Taman Nasional Gunung Halimun (Gunung Halimun National

Park)

UNDP United Nations Development Programme

UU Undang-Undang (statute)

UUD Undang-Undang Dasar (basic statutes)

UUPA Undang-Undang Pokok Agraria (Basic Agrarian Law)

WALHI Wahana Lingkungan Hidup (Indonesian Forum for

Environment)

WHO World Health Organisation

WPTI Wildlife Preservation Trust International

WWF World Wide Fund for Nature

YEH Yayasan Ekowisata Halimun (Halimun Ecotourism Foundation)

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