of persuasive reasoning and scientific debates, and are often perceived as having a high degree of political correctness and diplomatic modes of behaviour, these meetings produce instruments and legislation that will impact science and the execution of field research. The CBD is one of those conventions that produces a multitude of measures for the protection of biodiversity worldwide that will sooner or later influence the way science is conducted.

Of particular concern is the drafting of the code and which parties are present and which are absent in this process. As mentioned earlier, the representatives of indigenous and local communities contribute to the drafting of the code from a rather negative perspective on research. Their contributions reflect injustice and anger, dismissing research as the root of all iniquity imposed upon them. Without wanting to downplay the negative impact that research might have had on indigenous peoples' lives, we fear the drafting of this code of conduct is being influenced by such distrust. Instead of creating a guarantee that traditional knowledge is valued, and treated with the same respect afforded to other knowledge domains, the current draft seems to depart from a negative and defensive perspective.

For instance, Principle 15, as it is formulated now, will seriously complicate research within a territory under indigenous legislation. This principle requires researchers to only start research activities after all possible impacts on communities involved have been acknowledged and documented and agreed upon by the communities involved. The fact is that claims and rights to traditional knowledge are often diffuse and subject to internal debate and controversy. Furthermore it is not always known to the community itself which members of the community are the rightful owners and decision makers with regard to such knowledge. Often traditional knowledge is collectively owned or not subject to rules of ownership at all. This, together with the debate on who has (and does not have) the right to claim indigeneity and which boundaries actually constitute an indigenous community, may render future research fairly impossible.

So far the target group of the code is described as anybody involved in intervening with indigenous and local communities. This can refer to research, but also to tourism and the extracting industries. Limiting the discussion for the moment to researchers, it is not yet clear whether the code only targets foreign researchers or also researchers from the country of the indigenous communities. And what about researchers who belong to the indigenous community themselves? Not all indigenous peoples' representatives seem to be willing to discuss the applicability of the code to their own circles. This question is relevant because there are several instances of indigenous people marketing traditional knowledge at the expense of their fellow community members.

Another area of concern is the relationship between this ethical code of conduct and existing codes as issued by associations of professionals. Numerous professional organisations have discussed ethical issues at length and come up with ethical codes for professionals working in these fields, including . ethical codes for anthropologists, archaeologists, ethnobiologists, and museums. These codes generally also include steps to be taken in case of violation of the stipulated principles and norms. Committees within such professional organisations have the authority to look into official complaints and, if necessary, take measures including expelling members and seriously inhibiting the successful careers of such members. So far, there have been no discussions regarding the complementarity of the code with other professional codes, or about the establishment of an authority to mainstream the implementation of the code and monitor violations.

At a higher level there is also another important issue to consider. In addition to this ethical code of conduct only addressing the relationship between researcher and informants there are other normative fields in the scientific process. These fields are related for instance to the fundaments of scientific inquiry in general but also to the use of scientific knowledge, the position and influence of third parties in case of contract research, and the call for transparency in the scientific process itself. In case of conflicts between these norms and ethical principles, it is unclear which one should be prioritised. We believe it is necessary that the world of science, through its professional organisations, should be involved in the next phase of the drafting of this new code. This could avoid future complications and inconsistencies between codes of conducts and the wider normative context within the world of science. In particular, there is a need for critical reflection on the scope of the new code and the forum that will be made responsible for its implementation, including complaints and appeal procedures. Hopefully this would also create an ethical code that is less based on mistrust and suspicion and that will allow well-intended, carefully designed and implemented research to be continued.

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The draft elements of a code of ethical conduct discussed at the CBD WB8(j) meeting in Montreal can be found at: www.biodiv.org (UNEP/CBD/WG8J/5/L.10). There are numerous ethical codes for all kinds of professional scientific organisations. Some of the most relevant codes in this context are:

1. American Anthropological Association (AAA)
   Code of Ethics, as approved in June 1998.
2. Archaeological Institute of America (AIA)
   Code of Ethics as approved in December 1997 and Nederlandse Vereniging van Archeologen (NVvA) Gedragscode voor beroepsarcheologen, as approved during the General Assembly in Amsterdam (7 December 2001).
3. International Society of Ethnobiology (ISE)
   a. Declaration of Belem (July 1988)
   b. ISE Code of Ethics, adopted at the 10th General Assembly, Chiang Rai (8 November 2006)
   c. Complementary Tool Kit for the 2006 ISE Code of Ethics
4. International Council of Museums (ICOM) Code of Ethics for Museums as revised by the 21st General Assembly in Seoul (8 October 2004).

# People, park and partnership

## *Problems and possible solutions in the Morowali Nature Reserve*

Jabar Lahadji

Indonesia's diverse ecosystems contain some 500 species of mammal and 12 percent of the world's bird species. But Indonesia's tropical rainforest, which originally covered more than a million square kilometres, is being lost at a rate of 10,000 square kilometres each year, and many species are on the verge of extinction. Morowali is a nature reserve of 2,250 square kilometres in Central Sulawesi. It is home to a number of rare endemic birds, including the the maleo, and mammals, including the anoa and babirusa. The Morowali forest is also the home of the To Wana, one of the several indigenous peoples in Central Sulawesi. Around 3,000 Wana live within the reserve, and approximately another 3,000 in villages just outside its boundary. The To Wana traditional culture and economy depend on swidden agriculture (shifting agriculture, or 'slash and burn'), hunting, and the collection of forest products, particularly *damar* (conifer resin).

After Brazil and the Democratic Republic of Congo, Indonesia has the greatest area of rainforest of the world, and its forests are uniquely biodiverse. But Indonesia's economic development depends partly on the exploitation of natural resources, including timber. This is a major cause of destruction of primary forest and degradation of biodiversity. Aware of the seriousness of the situation, many individuals and groups have come into action to preserve the country's tropical rainforest. The Indonesian state has long protected particular areas and species. In the 1970s some international organisations, including the World Conservation Union (IUCN) and the World Wildlife Fund (WWF), started to assist the government in proposing further areas to be protected. One such area was the Morowali Reserve. The establishment by law of national parks and reserves, however, has had only a limited effect on the rate of destruction of primary rainforest. Numerous non-governmental organisations in Indonesia are active in local nature conservation projects, and in situations where nature and the environment are threatened by commercial operations, whether legal or illegal.

### 'No to government, no to religion, no to villages'

Long before the designation of Morowali as a nature reserve in 1980, part of the area concerned was under communal ownership by groups of To Wana. These people have a cultural heritage of adaptation over many generations to life in the mountainous Morowali rainforest. Their lifestyle was disturbed by the establishment of the reserve, which limited the Wana in their movements and prevented them from carrying out the normal activities necessary for their subsistence: swidden agriculature, hunting and collecting. Furthermore, they were blamed for damaging the forest and its wildlife. For this reason, the government attempted to force the To Wana to settle in new villages

along the border of the reserve and to adopt mainstream Indonesian culture and lifestyles. From that experience the To Wana learnt a costly lesson which inspired them to adopt the slogan: *tare pamarentah, tare agama, tare kampung* - 'no to government, no to religion, no to villages'.

The life of the forest-dwelling To Wana depends strongly on their consciousness and knowledge of their natural environment. Unusual or dangerous events, whether natural or man-made, are interpreted by the Wana as consequences of anger on the part of the spirits which protect the forest. When such events occur, the Wana will perform a ceremony in the form of a ritual offering called *kapongo*. The same is done when a patch of forest has to be cleared to make way for a new swidden field. It is indicative of the special importance of the natural environment in To Wana beliefs that no ritual is held upon the building of a swidden house in the clearing. In other parts of rural Indonesia, by contrast, the inauguration of a new house is typically a key ritual event.

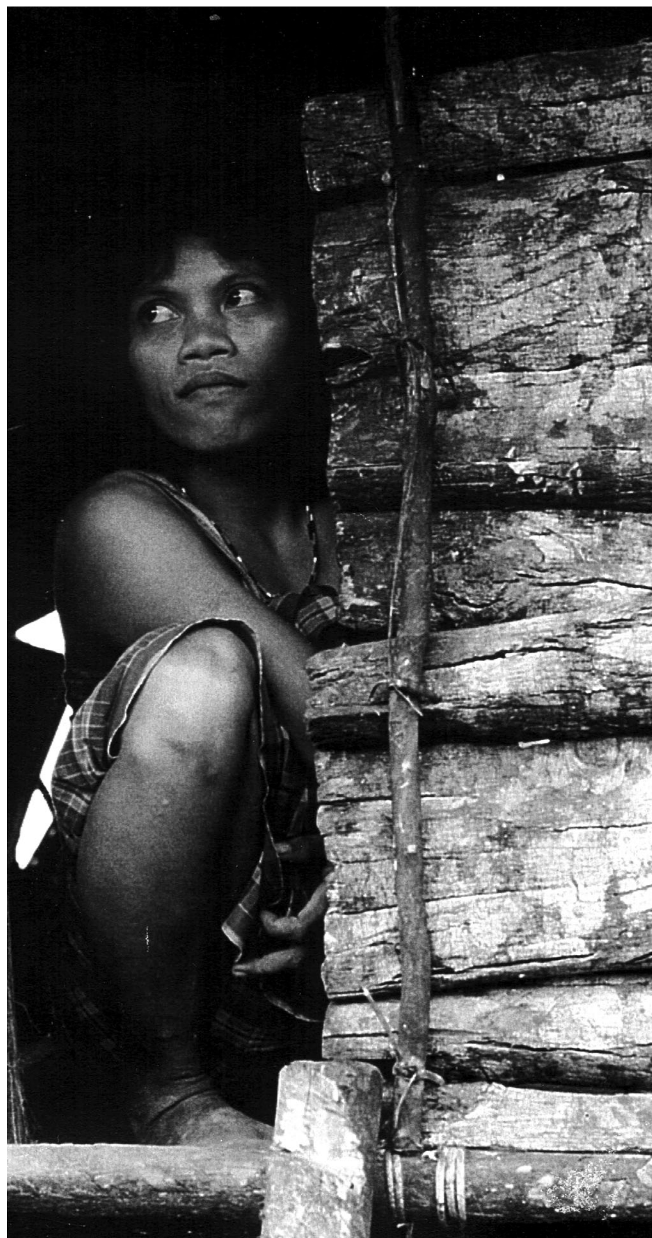
The way in which the Wana classify forest likewise reflects the intensity of their relationship with their environment. Within the untouched primary forest, firstly, there are many places, called *junju*, where all exploitation is strictly forbidden, *kapali*. Secondly, there is the primary forest which can be used provided the appropriate ritual is performed; this category is called *pangale* or *rampangale*. And thirdly there is the secondary forest, *tobu*, which has grown up on former swiddens.

After the *kapongo* ceremony has been carried out, a swidden is opened by cutting down the shrubs and trees and burning the chopped vegetation at the appropriate time, in November, shortly before onset of the rains which will disseminate fertilising nutrients from the ashes into the soil. The size of the field, which supplies food crops for domestic consumption, ranges from under half a hectare up to two hectares per family. The swidden is only used for one season, after which a new field is cleared nearby. After four to eight years, an old overgrown swidden is again ready to be exploited in a rotational manner. For practical reasons primary or fully grown forest is rarely used in this agricultural system, since the Wana do not have the heavy tools needed to cut big trees without great effort.

In the periods when there is no work to be done in the swidden, the Wana, both men and women, collect non-timber forest products such as *damar*, rattan, honey and some medicinal materials. The intensity of these activities is low, and the traditional methods of collecting are very much sustainable. In the past most forest products were exchanged directly for imported goods supplied by traders, although nowadays cash payments are increasingly involved.

Hunting, using traps or blowpipes, is a minor activity of the Wana. Traps are placed around the swidden, or in the forest, during trips to collect forest products. Almost all types of game that can be trapped, included protected animals like anoa and babirusa, are consumed. Blowpipes, shooting poisoned darts, are used to hunt all kinds of tree-dwelling animals. A study by Michael Alvard has confirmed the sustainability of Wana hunting practices: 'The potential for sustainable harvests by traditional Wana hunters in Morowali nature reserve, Central Sulawesi, Indonesia', *Human Organization* 59 (2000): 428-440.

## Friends of Morowali



In 1987 a small group of young people, brought together by a common love for hiking and nature, began to gather information concerning the Wana people and the Morowali reserve. This group, headed by myself, volunteered to assist the few (at that time only two, nowadays six) rangers responsible for patrolling and protecting the reserve and for informing the public about it. In 1991, Marty Fujita of the American conservation organisation The Nature Conservancy (TNC) paid a visit to Morowali and inspired the group to form a non-governmental organisation which was called *Sahabat Morowali*, Friends of Morowali.

In its early years Friends of Morowali, in collaboration with other local Indonesian NGOs, was strongly focused on advocating the right of those Wana indigenous to the reserve to remain within it, against attempts by the government to resettle them outside it. Among the main arguments used in this struggle was the need to protect the unique traditional culture and knowledge of the Wana people. Information regarding the To Wana and their way of life, collected over the years through collaboration with the Wana, was conveyed by Friends of Morowali to the outside world, including government officials and institutions, the management of the Morowali reserve, tourists, and scientists, who were assisted in visiting and studying the reserve and its ecosystems.

Collaborating with Friends of Morowali made the Wana themselves more aware of their traditional way of life and cultural heritage, and encouraged them to express their own opinions regarding development and conservation. Friends of Morowali aspires to help them make their own choices - for instance, to remain within the reserve and continue their sustainable use of its resources. Those who prefer to resettle, meanwhile, are assisted in acquiring the skills necessary for successful integration into mainstream society.

In 1996, Friends of Morowali also began to address the problem of local but non-Wana village people encroaching on the Morowali reserve in order to profit from its natural resources. Firstly, a socio-economic study was initiated to compile an inventory of the economic needs of the communities involved. A second initiative was to set up an educational awareness programme for the villages surrounding the reserve. Thirdly, Friends of Morowali, together with invited specialists, organised workshops for a wide range of government officials - including the rangers of Morowali - to help boost their professionalism and cement the political will to enforce the law.

## Results and prospects

These efforts have not been without results. Villagers, for instance, have been successfully encouraged to use fish traps in the sea, reducing their need to encroach on the reserve. Several other similar programmes exist, supported or implemented by the government. In the field of environmental education, each village now has an informal leader who organises informative and discussion meetings on the importance of nature conservation. Local *imam* and church ministers also pay attention to the topic in their weekly sermons, and teachers introduce it to children at primary school. And the reserve's rangers genuinely try to enforce the law, in so far as this is possible for six men in a forested area of more than 2,000 square kilometres.

Friends of Morowali cooperates with many other Indonesian NGOs which have networked with each other to form a strong movement, also supported by international NGOs, to advocate a moratorium on the commercial use of primary rainforest. Other activities kept under scrutiny for their environmental impact are mining (gold, nickel), oil drilling, large palm oil plantations causing forest destruction, and involuntary resettlement. At the same the network initiates and promotes traditional community forestry, which it believes is the only way to preserve rainforest and natural resources.

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