

BUT I'M JUST AN ANTHROPOLOGIST – WHAT CAN I DO ABOUT FARMERS' PROBLEMS?

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Environments, resource management and agricultural economies are in crisis throughout Southeast Asia. Bali, as a small island with dense population, a relatively high level of economic development, but limited natural resources and carrying capacity, provides an unusually focused “laboratory” for the study of interactions between environment, resource management and development. This paper reports on my attempts to trace the various patterns of (dis)articulation between local farmers, (mostly local) agricultural scientists, government departments, foreign aid agencies, expatriate residents and NGOs, which both facilitate and hinder more appropriate forms of development. It also argues that anthropologists are especially well-equipped to play a key role in identifying problems and facilitating communication between local communities, scientists and managers.

Introduction

Since 1993, when I first started doing ethnographic research in Bali, I have watched the lives of farmers getting harder while everyone else's lives gets easier. Ten years later, in mid 2003, I decided it was time to apply whatever I had learnt in those years to the practical problems of farming in an increasingly prosperous and commercially based economy¹. I am by no means the only one concerned about this problem, but despite much useful knowledge and good intentions all round, the critical connections between those who know something about agriculture, those who have the power to make things happen and those in the ricefields are not being made. As an anthropologist I have neither specialised knowledge nor power but what I do have is a general knowledge of Balinese culture and society, a disciplinary commitment to the plight of the farmers as well as a degree of privileged access to those with knowledge and power. I began by simply asking farmers about their problems and soon found myself firstly mapping social patterns of knowledge and power, then trying to facilitate strategic linkages between those who seemed to need what each other had.

What follows is firstly an overview of the problem, then a simple map of the main interested parties and their varied knowledge and power, followed a report on some preliminary ethnographic-based work. My argument is essentially that there can be a useful role for an anthropologist working independently of agencies, institutions and research teams, based not on any specialised expertise, but on exactly the resource scientists and managers do not have: a deep ethnographic knowledge of the society in question. Such knowledge does not necessarily lead to startling insights and dramatic action: it can be simply seeing the obvious and acting as a catalyst and facilitator.

¹ I would like to thank my various friends and informants who taught me the little I know about farming in Bali. Many of them are anonymous farmers, but others with an interest in farming include Wayan Tirja, Made Cakra Widia, Dr. Gede Suyatnya, Christine Foster, Ngurah Karyadi, Carol Warren, Ed Dunk. Thanks also to Monica Minnegal who organized the symposium at which the first version of this paper was presented, as well as the other participants in it and especially Peter Dwyer for editorial comments and suggestions. If there is anything of value to be found in this paper, I would like to dedicate it to the memory of my first teacher of the magic and mystery of rice-growing, the late Gusti Putu Widia of Taman Klod, Ubud.

What's the problem?

Agriculture, especially the cultivation of rice in irrigated fields, has been the basis of Balinese human ecology, economy and culture for over 1000 years. During the past thirty years, this ecology/economy/culture has been drastically transformed firstly (chronologically) by the technological and ecological changes of the Green Revolution, secondly by a process of general modernisation driven by tourism, thirdly by the globalisation of the agricultural economy and finally by the effects of a series of economic and political misfortunes in Indonesia since 1998.

Most households in the southern part of Bali where tourism is centred, are dependent, more or less directly, on tourism and most people work in tourism or industries supplying goods and services to tourism. In this new economy farming has been marginalised, economically, culturally and ecologically. Holdings are small, the price of rice is low, input costs are rising constantly and the cost of living in an increasingly affluent and modernising society is also rising. It is hard to feed a family from farming, let alone provide all the necessities of modern life which require cash – the motorbike, the power bill, health and education expenses.

The farmer is no longer the epitome of Balinese adulthood. For young people, the prospect of long days of hard work in the sun and mud, for small and uncertain return holds little appeal compared to the multifarious attractions of tourism. Most farmers in the tourist areas are men of middle age or older. Farming is seen as an option only for those too old or too uneducated to find a place in the new economy.

Water supplies are pushed to the limit by double or triple-cropping of rice as well as increasing demands for domestic use and for hotels, swimming pools and golf-courses. Thirty years of petrochemical fertiliser and pesticide use are starting to manifest themselves in soil degradation, water pollution, and suspicions of links to new health problems. The demand for land for development and the consequent inflation of land prices leads to steady conversion of land from agricultural to residential, tourism or commercial uses.

This is a familiar picture throughout southeast Asia (see for example Rigg 2003), but here it takes a distinctive and extreme form because of the tourism-driven modernity of Balinese society – and this is especially so in the tourism-dominated southern part of the island.²

The social distribution of agricultural knowledge: Who knows what about farming?

Farmers

Farmers feel they are caught in an ever-tightening squeeze between rising production costs and returns for their produce which never seem to increase – exacerbated by a wider context of generally rising incomes, standard of living and expectations. The main production costs are fertiliser, pesticides, tractor ploughing and contract labour – all of which are rising while the price of rice is held artificially low by a combination of government regulation and cheap rice imported from Vietnam and Thailand. Although farmers receive some financial support from the government and are grateful for the efforts of local farm advisors, they feel the government has abandoned them and they have little confidence that it will provide solutions. They sense instead that the solutions lie in the mystery of the marketplace but they are ill-

² Other areas are poorer, but agriculture is less marginalised. Some kinds of agriculture, such as market-gardening in the mountains are more economically viable. So while I am speaking generally about agriculture, my comments apply most directly to the cultivation of irrigated rice in southern quarter of the island where tourism, modernity and affluence are concentrated.

equipped to understand it and very hesitant to approach it. Consequently they remain at the mercy of the rice-merchants who buy their grain at low prices, sometimes with part-payment in advance to help with production costs.³ They have also heard of new and potentially lucrative approaches with names such as sustainable and organic but these are, like the market through which they are mediated, mysterious and unattainable.⁴

Government

The Indonesian government is involved in agriculture at several levels. General policy on agriculture has shifted over the past 10 years, partly as a result of International Monetary Fund (IMF) and World Trade Organisation (WTO) encouragement, from a focus on local production of staple goods for local food security to an emphasis on cash-crops for the market, and especially for export. Policy documents contain phrases such as '*agribisnis* which is competitive, community-based, sustainable (*berkelanjutan*), and decentralised' (Dinas Pertanian Tanaman Pangan, 2004). There are obvious tensions between some of these terms – but the key words are *agribisnis* and 'competitive'. There is recognition of and lip-service to terms such as community-based and sustainable, but the bottom line is a large-scale, industrial-business model of cash-cropping for export.⁵

Local branches of the Department of Agriculture are busy trying to translate these new concepts into practical programmes for farmers whose only experience, like that of the departments themselves, has been over thirty years of responding to a regime of top-down directives. Although they are aware of alternative approaches which might utilise resources more effectively and cater to new markets, and have in some cases initiated trial projects, they tend to be sceptical of the productivity of such approaches and their capacity to be applied on the scale necessary to maintain production levels (Dinas Pertanian Kabupaten Gianyar 2004). A further obstacle to such innovation is that for some years the departments dealing with food crops and livestock farming have been separated, hindering the continuation of old integrated systems or the development of new ones. One of the innovations of recent years has been a series of inter-departmental pilot projects for re-introducing indigenous cattle into ricefield and horticultural ecologies. The primary motivation is ironically official concern over the decline of population of Bali cattle, but the benefits in terms of soil fertility, reduced input costs, proceeds from sale of cattle and ploughing power are becoming apparent. But such projects are few and far between and their full potential has not yet been realised. A hopeful sign however is a new plan for recombining the two departments.

The real coal-face between government policy and farmers is the farm-advisors, the extension officers who often live in rural areas and spend much of their time in the field. In the past they served largely as downward conduits for instructions from above – but now they play a more active role in helping farmers face the challenges of the future. Those I know are dedicated, hard-working and intelligent, but their visions are limited by their training and experience in the top-down system. They too have heard of new methods and in some cases believe in them in principle, but they tend not to have sufficient knowledge, direct experience or autonomy to play a key initiating role. While

³ Although farmers have, as Peter Dwyer pointed out to me, "centuries of market experience", these markets were historically controlled, as in much of Southeast Asia, by merchants rather than farmers. During the three decades of Suharto's New Order, they were significantly mediated by government price-fixing and subsidies. Since then the nature of these markets has changed dramatically in response to the IMF and WTO pressures and few farmers have the skills or resources to deal effectively with these.

⁴ There is obviously a degree of generalisation in the picture painted here, but it consists of a refrain I have heard, with minor variations, many times and I have yet to hear a rice-farmer with a radically different view.

⁵ For a further discussion of current government policy on agriculture, and the alternatives to it, see my article in press (MacRae 2005).

they, especially the younger ones, often have some academic agricultural-science knowledge, they usually occupy a different social, economic and cultural world from both conventional farmers and the people who are actually working with alternatives to the top-down *agribisnis* model.

Alternative Practitioners

While the emphasis of government policy is on *agribisnis* and *agroindustri* and the main local market is for affordable rice and the other necessities of Indonesia diet, there is a growing local market for both 'traditional' and 'organic' produce in restaurants, hotels and for the large and relatively affluent expatriate population – a niche market but an affluent and growing one in which demand outstrips supply.

There are a number of mostly small enterprises producing for this market – ranging from expatriates with vegetable gardens to feed their children or hobby-farming to Chinese market gardeners in the mountains for whom it is good business to produce organically because input costs are lower and produce prices are higher.

Almost without exception, if for different reasons, these producers hope their neighbours will take up their example and start producing in the same way. But, also almost without exception, they are puzzled by the reluctance of conventional farmers to take what to them was an obvious step with proven advantages. Clearly there is a mismatch of perceptions or a problem of communication. What is needed is some means of interpreting and facilitating communication – someone with expertise in making the vital connections between producers and markets.

One such enterprise is C.V.Bening, a company run by a young American couple with training and experience in organic agriculture. They have established a marketing network among hotels and restaurants and are currently seeking export markets. They producing organic vegetables and chickens themselves but are unable to keep up with the demand (in terms of either quantity or variety) so they are also locating and supporting farmers interested in converting to organic production for their markets. But they find it hard to locate willing farmers and at the same time many potentially interested farmers either do not know about them or how to approach them. The gap between markets and farmers is not easily bridged.

Non-Government Organisations (NGOs)

NGOs are specialists in working at this interface between local communities and larger systems of knowledge and resources – managers of information and projects. There are a number of NGOs in Bali, working on a range of environmental, social and especially health issues. Some profess to interest and experience in agriculture, but those I have know seem to be working at a level somewhat removed from the field – producing training manuals and running courses and seminars. None have a track record in on-the-ground facilitation of agricultural development.⁶

However on the neighbouring island of Java, where essentially similar ecological and economic conditions prevail but with a longer tradition of commercial agriculture and without the prosperity and cultural effects of tourism, there are other examples. On the outskirts of Jogjakarta is a shop called Sahani. It operates on Fair Trade principles, wholesaling and retailing traditional and organic rice produced by several farmers groups in the surrounding area. It began in 1977 out of a truly grass-roots network of local farmers. Over the years other local NGOs became involved and since 2003 Oxfam has provided funding for a manager and one other employee. Volunteer Service Abroad (VSO [UK]) also provides a worker with expertise in foodstuffs marketing. Ownership and control is firmly in the hands of farmers but it is still dependent on

⁶ There are minor exceptions, such as the East Bali Poverty Project which operates in a very specific and localised social, economic and physical environment.

Oxfam and VSO for staff and expertise. In mid 2004 marketing was the main issue, as (unlike in Bali) production from its network of farmers greatly exceeded the shop's retail demand. Farmers who grow organically and sell through the shop report reduced yields but better prices and lower input costs – the balance is much the same economically – but they see the advantages in environmental and health terms. They were however disappointed at not being able to sell all their produce at premium organic prices and most are still dependent on other crops (in some cases tobacco, ironically grown organically) to supplement their incomes. Despite these and other problems, Sahani is a model for successful intervention by NGO's in making the critical links between producers and consumers.

Local Scientists/Academics

Most Indonesian universities have substantial agricultural science faculties, but Indonesian academia is plagued by a number of problems. One of them is the reluctance of middle-class academics to go to the field, get their hands dirty and listen to the views of village people. Agricultural scientists share in this but are more field-oriented than most. Some I know are actively engaged in government-sponsored field projects and some grow various crops on their own land for experimental and/or commercial purposes. But as part of the modernising middle-class they tend to subscribe to a modernist-scientific view of what modern agriculture should look like. They are also heavily influenced by Government policies directing them to an agro-industry/agribusiness model.

One exception is Ibu Kartini, a soil scientist at Universitas Udayana (UNUD) in Denpasar. For twenty years she has researched, practised and advocated the regeneration of depleted soils with organic composting accelerated and enhanced by earthworms. Although she has a successful worm farm in central Denpasar processing abattoir wastes and several organic vegetable growers in the mountains use her products and methods, she remains marginal to the agricultural science and government establishments, at best ignored and at worst ridiculed. So there are social and cultural barriers hindering direct relationships of co-operation between farmers and academics.

Foreign Academics

Bali has no shortage of foreign researchers, but most of their research tends to be on the endless intricacies of traditional arts and culture or on tourism and its discontents. There is little of the solid economic, environmental or development-oriented anthropology that is common in the rest of Southeast Asia, let alone models for successful anthropological intervention in development processes.

There are two striking exceptions. Stephen Lansing's extraordinary work on the relationships between irrigation systems, planting regimes and traditional ritual cycles was aimed at providing farmers, ritual specialists and bureaucrats with practical tools for regaining control over the balance between pest control and water management (Lansing 1991). Although his work is known by people at all levels of the agricultural system in Bali, it has not been taken up systematically and seems ironically to have had little effect at scientific or management levels. Despite serious engagement with both scientists and managers, and obvious practical relevance, Lansing's work has had surprisingly little effect on the ground. The second exception is Carol Warren's work with local communities and NGOs on sustainable development projects. Her work is not especially oriented to agriculture but it provides a model of how an anthropologist can work – with her feet firmly based in the grass-roots, but making connections with other levels of the political and economic order (Warren, in press).

Ethnographic conclusions

While many of the problems faced by farmers in Bali are substantially caused by political and economic factors beyond local control, the obstacles to addressing them at a local level are mostly deficits of knowledge and gaps of communication – people problems rather than technical ones. While farmers understand that their fundamental problems lie in the relationship between their production and the market process, they lack confidence in new crops and they are generally ignorant and afraid of marketing. Alternative producers are unable to inspire their neighbours to follow their example. There are institutional gaps between government, NGOs and the local agricultural scientists – the parties who may have the necessary resources for facilitating new ways. Farmers have neither confidence in the government nor a social connection to the NGOs or alternative producers. This raises the question of what an anthropologist, with little expertise in farming but some general knowledge of Balinese society and culture, can usefully contribute.

What can an anthropologist do?⁷

Virtually everyone I spoke to was responsive and even grateful for my interest – farmers especially feel like the forgotten people of modern Bali. They often asked me to help in finding markets and other ways into the new economy. It also became apparent fairly quickly that, surprisingly I knew lots of people who did not know each other but who obviously had common or complementary interests and in many cases felt isolated and in need of support. So after my preliminary research in 2003 (and again in 2004) I wrote a brief, simple report of what I'd learnt and a list of people and projects which I distributed to as many as possible by email – essentially establishing a network of people with common interests. Most of these people were expatriates or foreign researchers, but the report has since been translated into Indonesian and distributed further. The people it is least likely to have reached, however, are the ordinary farmers struggling away in their fields.

My plan for my brief visit in 2004 was to move beyond information-gathering to trying to apply this knowledge in a more practical way. The most pressing task seemed to be to initiate social contact and facilitate exchange of information between (especially local) scientists, (government) managers, farmers and markets. Here are two brief stories from the ricefields: preliminary and yet to bear fruit. They may appear ludicrously simple and perhaps even naive, but the simple and obvious are easily, and often have been, overlooked.

Nyoman Candra

On the fringe of the tourism-dominated economy of Ubud, Nyoman Candra owns over half a hectare of ricefields which are worked by a sharecropper. Nyoman has lived overseas, speaks good English and works as an immigration consultant. He can see the situation from various points of view and he wants to return, for a combination of health, environmental and economic reasons, to traditional rice varieties and methods, which are essentially organic. He has tried several times already with small plots but his sharecropper is reluctant and his neighbours are sceptical. When I met him he said that he felt isolated and despondent and that what he most needed was some moral support.

⁷ I should at this point declare and clarify my interest in organic and sustainable forms of agriculture. This is based on a combination of environmental and health factors, but also ones of economic sustainability which are particularly relevant in the unusual economic environment of Bali. While Balinese farmers are aware of the health and environmental factors, they see their problems primarily in economic terms and this is the basis on which I initiated the tentative interventions described here.

I told him as much as I knew about the other people working in the same direction, and gave him some material to read. A few weeks later I received a text (SMS) message from him saying he was planning to plant the whole area in traditional rice and did I know where he could get good seed. I connected him (also by SMS) with an American expatriate who was also experimenting with old rice about half an hour away – and he got seed and advice from him. I also told him about the Sahani network in Java and gave him copies of their booklets and VCD from which he made copies. I also connected him by SMS to the group discussed below. When I last heard from him he was about to plant.

Subak Lumbung

Made Tirta is an urban-based political activist, but his home village, Lumbung is in West Bali, far from tourism profits and urban concerns. Many of the younger generation have migrated to the city or tourism centres in search of employment but virtually everyone remaining in the village lives from farming. This has long been Bali's premier rice-growing area, but over the years Made has watched his relatives and neighbours reduced from proud and prosperous farmers to not being able to make ends meet and becoming increasingly bewildered and demoralised. The majority of them grow standard hybrid rice and sell it to merchants (*tengkulak*) who come to their village each year with offers to buy the standing crop, and offering advance payments to help with up-front costs. Needless to say the prices they offer are not high. A minority of farmers are still growing traditional varieties, simply because they like them better. These are the true artists of the ricefields; traditional rice requires more work, the crop is smaller and the prices the merchants offer are the same as for hybrid rice, but it is beautiful to watch and it tastes better. Others, because of water shortages and the low prices for rice, have begun planting other crops – mostly corn, which is reliable and cocoa which had a brief period of fetching high prices.

Made has been exhorting them for some years to return collectively to traditional rice but with little success. He asked me to come and talk to them on the grounds not of my (non-existent) expertise, but because they are more likely to listen to an outsider, especially a foreign professor, than to him. I went there with him and spent an afternoon listening to their stories, looking at their fields and telling them about the other projects I had seen and the good market for traditional and organic produce. They understood the idea but were worried about the practicalities of marketing. I offered to bring back people who knew more than me and they were keen to hear more.

I looked for local NGOs who might be interested in helping – but found they either had little experience in hands-on farming issues or were pre-occupied with funding and partnership issues. I also approached a senior local economist who is currently setting up a new postgraduate programme in rural development and poverty reduction – and who was actually looking for a farming group on which to run a pilot project on more commercially oriented farming. He was interested in foreign collaboration but is also pre-occupied with funding issues, and this project did not look attractive to him unless I could attract some funding for it. Scientists and managers are not necessarily easy to find, especially outside of formal project structures.

The person I eventually brought to the village was a senior agricultural scientist from the local university, with a track record of hands-on involvement in local projects – especially government schemes for bringing cattle back into cropping ecologies. He listened to their stories and made some suggestions: first, to contact the local Department of Agriculture and work with them; and, secondly, to start taking small steps themselves, such as dedicating a small portion of their fields to traditional and/or organic crops and involving their young people by asking them to attempt to market the crop to hotels, restaurants and expatriate shops.

I also gave copies of information from the NGO initiatives in Java, especially about the Sahani network, to my primary contact with this village, who will get it to others in the village in a way which suggests it has come directly from some outside source rather than through him so they will take it more seriously. I also arranged for Made Tirta to meet Nyoman Candra.

Practical conclusions

While much current anthropological work on development and environmental issues operates (quite rightly) at the level of analysis of institutions and structures of power which condition the actions of all interested parties, there remain problems of implementation, endlessly intractable but often fundamentally simple, at the grass-roots level. Anthropologists, with their unique training and commitment to ethnographic methods, are uniquely positioned to make a significant contribution both in terms of understanding and effective action at this level. What they have is precisely that which is most difficult for scientists and managers to achieve – the background of linguistic and cultural experience and the social networks necessary to communicate effectively with local people. I am tempted to glorify this with the label “ethnographic capital”, but that would perhaps reify and obscure the simplicity of it. Over fifty years of the development endeavour, the essential problems of (mis)understanding between the developers and those they seek to develop, have changed little. Anthropologists have tended largely to be critical spectators from the sidelines, but there is a growing consensus that we need to be prepared to work in interdisciplinary teams with scientists and managers. This may indeed be an appropriate strategy, but given the track record of scientist- and manager-driven development to date, what I would like to argue here is not against such involvement, but that there may be room also for alternative approaches, available even to solo academic anthropologists with ethnographic capital but limited time for contract/team projects. Such approaches would be based on the ability to identify problems and act as an initiator or catalyst for exchanges of information between local people, scientists and managers.

What has been achieved to date with both these (very preliminary) projects is at once very little and hopefully something more. Nothing tangible has, to my knowledge, yet changed for either of the groups described above. On the other hand both groups, in a short time and at little cost, have begun to see possibilities and made some simple connections to other groups and individuals with whom they have common or complementary interests and knowledge and may have the potential to work productively together. More work is needed, and time will tell whether they bear fruit, but let us not dismiss too quickly the simple and obvious solutions which lie in the ethnographic darkness between local people, scientists and managers.

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