

# Alor Community Based Health Project — Indonesia

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## Abstract

The Alor Community Based Health Project was implemented in the district of Alor in the Indonesian province of Nusa Tenggara Timur.

The project aimed to address primary healthcare issues but more particularly to establish mechanisms and sufficient levels of understanding for community members to take more control over their own health and development. The project recognised that health is not limited to clinical activities and that primary health care must address root causes of poor health and achieve sustainability through a community development approach. Malaria and access to clean water supply were identified as key health issues and income, or livelihood generation, was also identified as providing a means for communities to sustain their access to the health system.

The approach taken by this project has attempted to create a community focus for its activities and strengthen the capacity of the community to understand and engage with the formal health system. Activities within the formal health system were designed to strengthen the capacity of local health personnel so as they could deliver better services and also feel a sense of achievement in obtaining better results. Activities within the community were undertaken with the use of qualitative surveys such as Participatory Learning and Action and materials in their own languages and were expressed through formation of groups and committees. These are being reinforced through a supervision system with locally-based motivators and through training in skills to increase income.

## Keywords

Community, development, health, participation, Indonesia

## Introduction

The provision of satisfactory healthcare in most societies can be challenging, even more so in developing countries. Indonesia in the 1990s was one of those cases where, despite innovative attempts to develop community outreach programs through *posyandu* (community health posts), the supply of services was inadequate. The Asian Development Bank (2001, p. 11) describes the situation like this:

“Through the mid-1990s, use of public health facilities was low and declining. National performance standards did not exist. There was little pressure on the health centre to

respond to the needs of the community or to improve the quality of services. Drug prescription practices were economically inefficient, often ineffective and sometimes unsafe. Moreover, many village health posts, the backbone of rural health, had ceased to function.”

Not only was supply a problem, but also demand for services was low:

“A rural population, still with little educational background and with a traditional respect for authority, is unused to insisting on service quality and any effort to mobilise demand for improved government health services would be confronted by an authoritarian political and administrative system that sees any organisational activity not initiated by itself as a threat” (Achmad, p. 10).

The Alor Community Based Health Project (ACBHP) was an attempt to demonstrate an alternative model to the provision of services that would also create demand for those services. It was based on the premise that engagement with the community was essential for effective government service provision. This community-based approach meant that people’s views were taken into consideration, social customs and dynamics were recognised and utilised, local people were employed and given roles of significance and local people were empowered through capacity building.

The Alor Community Based Health Project (ACBHP) was part of the Australian government’s bilateral aid program to Indonesia through its development agency AusAID from 1996 to 2000. Alor is a district in the province of Nusa Tenggara Timur (NTT), located about halfway between Bali and Australia, just west of Timor island. Alor and was regarded as somewhat of a backwater even in NTT with endemic problems, the two key ones being malaria and lack of clean potable water.

This project saw a unique collaboration between the Australian government aid program and the Indonesian government through its Ministry of Health. The project worked in conjunction with the *Dinas Kesehatan* (district health office) and its agencies such as the *puskesmas* (health centres) and the community-based structures or *posyandu* (community health posts) as well as the personnel from these structures from doctors to *bidans* (midwives) and traditional birth attendants (TBAs).

The project generated considerable interest because the community-based approach delivered outcomes for community health that were not being achieved by the government health system. Large numbers of villagers were involved in health activities on a voluntary basis and could maintain clinic activities without constant supervision. The retention rates for

cadres<sup>1</sup> were much higher than the national average, the compliance rate for bed net usage was also much higher than national averages and mortality had decreased for women and children.

One of the reasons for the interest in the project was that the government was used to taking a selective primary healthcare approach with foreign aid. This meant specific medical interventions with the objective of improving health indicators at a minimal cost. The approach of this project was a more comprehensive or integrated approach to primary healthcare, where health was seen as part of the development process and neonatal care and health education was integrated with water supply and income generation. The key influence for this thinking was the work of Susan Rifkin and Gill Walt (1986, p. 560).

This project thus went about working with both the government, the supply side, and the community, the demand side, in order to increase the confidence of the community in their expectations of good health as part of their development. This paper illustrates these processes and the results achieved, first by examining the different phases of the project and then by presenting particular sectors of activity.

### **Design phase**

It became very apparent during the design study that social preparation was a critical factor. Several government officials spoke of existing or previous projects that had failed, and claimed that the reason for this was the lack of community consultation. This occurred mainly in the water sector and was evident on the ground as sometimes whole sections of piping systems were missing and few areas outside the town were being served by piped water.

During the design study the design team met with and visited a selection of local communities and villages. The purpose was to understand the complexities of the social system of the area and how authority within communities was really implemented. From the advice of both local officials and its own research, the design team stipulated in the project design document (PDD) that when activities were conducted in a village the local religious leadership and the local *adat* (traditional customs) leadership should be consulted along with the formal administrative village head.

The design team met with the *bupati* (district mayor), some officials from the local assembly, heads of health, planning, education and social welfare departments. The team also met with *kecamatan* (sub-district) heads and officials. This enabled the team to explain the nature of the project concept, particularly its community focus, to the government. It was imperative that there was official acceptance and endorsement of the concept. It should also be noted

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<sup>1</sup> Cadres, in this case, were village volunteers who were given training for specific duties in the health posts.

that these steps were also taken at provincial level so that the team could bring official endorsement from that level to the district.

The ideas from the officials were listened to, especially as they were not keen for yet another project to come in and fail. In fact, one senior official recommended that the project should have a one year social preparation phase before implementation. The project design thus included a social preparation phase of six months where the project staff spent time engaging with officials and community members and spent time taking surveys to ensure that the project more fully understood the views of the community.

The project did not begin activities in all three selected sub-districts at the same time. The design was for activities to begin in one sub-district only, and that this area be one where some initial impact could be made before addressing the needs of the less easy sub-districts. This staggered entry allowed the project to establish its methods and credibility with government and community before it became fully committed.

### **Social preparation phase**

It is important to explain the activities during the social preparation phase because they demonstrate the kind of social engagement that generated community acceptance and how the development process was linked to health sector activities.

#### *Initial presentations*

The social preparation phase began with a district level meeting where heads of departments and other district level leaders were invited to hear about the project plans. The team worked with the office of the *bupati*, inviting him to chair the meeting and working with his assistants to send out invitations. The meeting introduced the objectives of the project, described the donor (AusAID) and the bilateral nature of the project and described the contractor (World Vision) in terms of its nature and role.

Discussion followed the presentations and most appeared to be happy about the concept and presence of the project. However, there were some concerns raised about the lack of lump sums and per diems to government entities and officials. It should be noted in this context that no attendance fee was paid.<sup>2</sup>

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<sup>2</sup> It is common in government culture in Indonesia for officials to be paid attendance fees. This compensates for the small salaries that many are paid but on the other hand tends to breed a culture where officials are willing to attend anything where there is payment involved. Unfortunately this does not generate a concern for evaluation and productivity. At a subsequent meeting to present the results of the initial survey, attendance fees were paid by the project.

A similar type of meeting was held in Alor Barat Laut (ABAL) *kecamatan* two weeks later where the *camat* (sub-district head) officiated. In this case the *kepala desas* (village heads) were very interested in the presentation, wanted to know more and were willing to give support.<sup>3</sup>

### Surveys

A Knowledge, Practice and Coverage (KPC) survey was then held in ABAL. The core project staff were involved in designing the survey together with technical staff from WV Indonesia. Provincial health officials were asked to scrutinise the survey contents and to endorse the methodology. This relationship with the province was further promoted by asking the provincial evaluator to audit the ensuing survey report. This level of engagement demonstrated the bona fides of the project with the formal health sector and government.

The second process was to inform the *bupati*, the *camat* and the *kepala puskesmas* (head of the health centre) in ABAL. The *camat* in turn informed his *kepala desas*. The *kepala puskesmas* was invited to participate and assist in organising the survey. There was some disagreement about the process of the survey in terms of personnel to be used. The *kepala puskesmas* wanted to use only *puskesmas* enumerators and interviewees but the project wanted to include non *puskesmas* staff. The reason for this was that if the survey had been solely in the hands of the *puskesmas* there was no guarantee of a fully independent result.

This disagreement serves to highlight the project's policy on community involvement and relationship to government. From the outset, the project was designed to be a community-based project. This did not mean that the government was therefore not involved; it was clear that government approval and involvement was essential. However, the project was equally convinced that the processes of the project could not be wholly under the jurisdiction of the government services. The first reason was to ensure independent operations. The second reason was to ensure trust from the community. The third reason was to provide opportunities for the community to become involved so they would feel a sense of empowerment. Fourthly, the surveys usually involved health officials/staff so as to show that collaboration was possible between the formal and community sectors.

In the end, the 15 enumerators comprised church leaders, selected cadres from the health system, prospective motivators (see the section on 'motivators'), *bidan di desa* and the *puskesmas* doctor from another part of Alor came in as supervisor. One of the important criteria for enumerators was an ability to read and count beyond a Year 6 level.

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<sup>3</sup> The presentations to the *kecamatans* of Perwakilan Pantar and Perwakilan Alor Timur were held about one year later, after the project had become established.

The results of the survey were fed back into the community through group discussions. These were held at *kecamatan* level and involved more or less the same people who had been present at the start up briefings, i.e. *camat*, *kepala desa*, family planning facilitators, *puskesmas* staff and other institutions in the area. An important part of these discussions was the opportunity to formulate recommendations for activity in the area.

Two issues of interest emerged from these discussions. Firstly, the *kepala puskesmas* was not happy with the results of the survey and did not attend the meeting. This was because he felt that the results should have been split to represent the two *puskesmas* in the sub-district — in other words, he was convinced that the results would portray a more positive impression of his own *puskesmas* when they were disaggregated. Although the project did not disaggregate the figures, this issue highlights the sensitivities that might exist in a project area and that need to be taken into account.

Secondly, community members gave different evidence to that of their *kepala desa* at the meeting — on the matter of where people defecated. This issue highlights the importance of including a representation of the community, not only of the leaders, as the leaders may face pressures to provide misleading information or may not know and may not be willing to admit that they don't know.

An interesting illustration of the success of the ownership felt by the community and the dilemmas of participation occurred in an evaluation survey conducted three years later. The team had identified enumerators using criteria of reading and counting skills. Some community members objected to the fact that they were not selected. They subsequently hid the documents from their *posyandu*, explaining that they had been given to understand that their community owned these documents, should be involved in any usage of these documents and moreover had been taught that they were integral to the project activities yet were being left out. After a process of negotiation, some *posyandu* cadres were allowed to join the enumerator team as assistants and the documents were released for the survey.

#### *PLA survey*

Despite the good relationships with government and community and the value of the material collected, more was needed to ensure acceptability to local culture and custom. The project needed to identify factors that would ensure community engagement and ownership. The project decided to use the qualitative survey methodology of Participatory Learning and Action (PLA). Based on the promotional material, it was felt that this was a particularly useful tool to supplement the more quantitative approach of the KPC surveys and according to the publicity, should enhance community empowerment.

After the PLA surveys, the people realised that they were important and were more open to the project staff. In the past, projects were only interested in the *kepala desa*; now others were included in the information collection process. Secondly, project staff wanted to identify themselves rather than be anonymous. Thirdly, they were clearly different from government workers as they were willing to stay overnight in the villages. Fourthly, the staff brought *sirih pinang*.

*Sirih pinang* is a traditional substance consisting of betel leaf, areca nut and lime. It is also traditionally a gift brought by guests that demonstrates that the guests understand and respect the local culture. It is extremely important to know about this traditional form of greeting and to bring this when entering a community for the first time. *Sirih pinang* was brought during the feasibility phase and right through implementation phases.

A further factor was the religious factor in the villages. Alor was predominantly a protestant area with a large proportion of Catholics and about 20-25 per cent Muslims. The core staff represented these groupings and the project midwife, Ibu Ida, was a Muslim from the local community. The fact that the core staff were not all of the same religious persuasion and included a local, strengthened the ability of the staff to enter the different villages.

One aspect of the PLA process deserves further mention as it was a factor that features in all project activity in Indonesia. In one village (Adang), the exercise involved calculating the value of local resources, including labour. When this converted into cash equivalents, the community perceived that they should receive cash payments. Secondly, names of participants were recorded and checked off a list when participating in activities. They automatically expected payment and when this was not forthcoming suspected someone (*kepala desa* or project staff) of being corrupt.

This issue was a version of the payment for attendance described above but was more pervasive in communities as many had come to associate 'project' with payment, thus undermining community development concepts such as voluntarism and mutual work for mutual benefit. This was managed by having community consultations where community members were free to question the staff and seek explanations for how project funding was spent.

#### *Using PLA for malaria intervention*

At the beginning of the project implementation period, project staff were led to understand from health officials that the community were given free mosquito nets but they didn't use them. A discussion ensued amongst the project staff as to whether to proceed with the bed nets program if the people did not use them. Some members argued that the nets should be distributed free so that they were more accessible to the people. Others argued that if the

community development aspects of the project were to succeed, then the nets could not be given free as this would undermine the sense of ownership. It was thus decided to open up the issue to the community using the PLA methodology.

The exercise used was to ask people to prioritise the diseases affecting them — as expected, malaria was often the most important. The next step was to ask people to comment or explain the causes of this disease. The answers varied from 'bad winds' to cleanliness but only a few mentioned mosquitoes. At this point the staff provided input on causes of malaria and explained that mosquitoes carrying parasites were the cause of malaria. They did not discount the fact that environmental factors, such as cleanliness had a role to play in this. The community were then asked to consider how to solve the problem. Answers again varied and ranged from 'cleaning up gardens' to producing smoke by burning coconut husks but few suggested the use of bed nets. This again provided an opportunity for project input on the value of nets. In the ensuing discussion, it was found that one of the reasons that people did not use nets was that they thought they were too expensive.

This brought the staff back to the issue of cost. The issue was raised with the community groups and discussion ensued on purchasing. It was estimated that it cost Rp10,000 to purchase a net from the shops in Kalabahi (capital of Alor) whereas the staff explained that they might be able to organise cheaper nets from Surabaya in Java. The people were asked if they were interested, then if they were willing to pay and if so, how much. The PLA method used was to write a list of payment levels and the community chose, usually by acclamation. Each village had differences in what they were prepared to pay but the project eventually chose an average amount of Rp2000 per net as a standard across all villages and made a schedule of villages with number of nets and amount to save. This eliminated potential accusations of bias to one village or another. The villagers now had to raise the money for their nets and had to let the project motivators know when they had achieved their target.

This process was used in all villages in the early stages of this process. As time went on it was not necessary to go through the whole process as the villages had already heard of the idea and indeed, some villagers were approaching the project staff with proposals. By the end of the project over 13,000 nets had been distributed, more than double the initial target. What was more pleasing was the compliance rate for usage which was 80 per cent. Even more pleasing was that people recognised that malaria incidence was decreasing and this influenced villagers outside the project areas to seek to be included in some kind of program.

#### *Water supply*

The feasibility study included a brief study on available water sources and recommendations of how to investigate further or access the sources. The main issue for the project though was how to involve the people in this exercise. PLA again was a useful tool. One of the exercises

was to ask the community to map their village, locating housing, environmental features, distances and water resources. Included in the location of water resources were questions on the difficulties of access and who the carriers and users were. A similar exercise to the disease priority listing was used to determine where water fitted in the list of their needs. This was followed by discussion of how to solve the problems they experienced with water supply. The issue of piping was often mentioned but also qualified by the cost. When it was pointed out that the project might be able to assist in the costs they were more open to considering this option and looking at how best to do this.

The message of the project again was community participation and ownership. The project required the community to assist in determining the location of water piping infrastructure but also placed a number of conditions on assistance. Firstly, the community was required to form a committee who would be responsible for managing the water supply. This management would involve collection of fees for repairs and maintenance, monitoring of the system for maintenance purposes and organising repairs when necessary. No work was done until the committee had been formed and training given in management of the water system. In most groups, instruction was also given in how to construct the system as well. Secondly, the group had to supply labour resources for construction. Construction was conducted with the assistance and under the supervision of the *Dinas* water technician, thereby involving local government.

This system for water supply worked well and the communities were extremely grateful for the water that they could now access with ease. One issue is worthy of note. The project attempted to bring about a degree of gender balance in the formation of these committees but this was relatively unsuccessful at the beginning. After two years this changed and groups started to include women as part of the committees. Part of the reason for this is that the project also utilised a strategy of exposure trips. These trips were to projects or institutions away from Alor so that villagers experienced exposure to other places, other people and other options. This challenged the worldview of the villagers. Some representative cadres were taken to Flores on an exposure trip to observe the operations of a much larger water supply project and they observed a higher percentage of women involved in the committees.

#### *Analysis of local perceptions on maternal issues*

The project used another strategy to understand the community, that of a consultancy by a medical anthropologist, Barbara Grimes. She first conducted a study on the local perceptions of health and illness in Alorrese communities, particularly during pregnancy and childbirth, identifying a number of possible health risks for the mother and child, based on cultural practices during pregnancy and childbirth.

“Health is seen as the result of an unhindered blessing coming from supernatural sources of life while illness and other difficulties are indications of some problem blocking the flow of blessing and life. The problem may stem from the sins and transgressions of family members or from evil sources of ‘sorcery’ coming from outside the family. A major implication of this world view is that Alorese treat disease and childbirth difficulties at both a physical and a social/ spiritual level, as they seek to deal with both the physical symptoms and the underlying social/ spiritual cause of an illness or difficulty” (Grimes 1997, pp.15-17).

The findings of this study and measures to overcome possible health risks were conveyed and discussed with government health staff and introduced into village cadre and TBA training. Health education materials addressed these health risks for mothers and messages were printed in booklets and posters with local pictures and in local languages. The transfer of knowledge about correct practices during pregnancy and childbirth, through the TBA and other locally appropriate health education had an impact on changing attitudes and behaviour during pregnancy and childbirth.

What is significant is that the community practices and views were acknowledged and given respect because the consultant sat with women for long periods of time, listening to them and asking them questions that were pertinent to their lives.

#### *The use of local language in health education communication*

Health education needed to be appropriate and understandable to the community so health education material was therefore produced in local languages and Indonesian using pictures of local people. This meant that messages were relevant and had meaning for the community.

“Health is a personal matter that is often linked to cultural beliefs and perceptions. The use of Indonesian in conveying health messages brings with it a sense of distance or a ‘culture gap’ between the material and the people. The Alorese people felt more at ease and were more willing to participate in discussions about health in their local languages.

Indonesian functions well as a state language and lingua franca in Alor, but there are limits to people’s proficiency in Indonesian and in most Alorese communities it is not the language of the home or the heart. Indonesian is the language of development and for many Alorese it is a language where opinion and control are largely in the hands of outsiders” (Grimes 1998, p. 7).

This approach was well received in the community and local people were excited to see their own languages accepted and printed. These materials attracted national interest where there was a growing acceptance that locally appropriate approaches to health, including the communication of health education in local languages, may be more effective.

### *Motivators*

An important feature of any document agenda is capacity building. One way in which this was done in Alor was to employ motivators from the local community and provide them with learning opportunities. They knew the local languages and were trusted by local communities. The role of these people was to live amongst the villages where the project was working and to monitor the activities of the project as well as to facilitate activities. Their facilitation extended to encouraging the community to develop village plans and prepare proposals for water supply, small income (livelihood) generation, etc.

They were trained to keep a form of diary that could be used for recording observations as well as planning. They kept lists of all activity participants, groups formed, progress made, etc. They were required to prepare monthly reports detailing planning and expenditure for a monthly meeting in Kalabahi. During that time they planned their next month in terms of activities and expenditure.

All the motivators were young men. The main reason for this was that they were living away from their own area and travelling frequently. It was difficult to find women who had the freedom to travel in this way and who could command respect when carrying out their duties.

### **Government health services**

The paper has so far focussed on the community so it is important to look at activities within the government and explore how the supply of services was enhanced. At the same time, although part of a bilateral aid program, the project was not just another implementing arm of the government.

The community-based approach of the project challenged the top-down government culture but was not confrontational. There were individuals within the system who welcomed the community-based approach and acknowledged its success in providing a more adequate service to the community. However, the district health office, despite indications of interest in the project when it entered the area, was not attracted to the approach of the project. The project did not serve the District Health Office's interest, which was the cash that it expected to receive from the project. The project was not able to alter the mindset of district health management to drive the extensive changes that need to take place within the district health system in Alor.

Government health services in Alor were inadequate. The availability of health personnel and effective district health management in Alor was very limited, with only 25 per cent of health positions operational. The health system was riddled with a bureaucratic culture of endemic corruption, poor systems of management and low levels of motivation and commitment to provide quality service. The service operations of sub-district health centres were, in turn, challenged by this ineffective bureaucratic system. Where resources were poor in areas like Alor, accountable budget and service systems were lacking.

The key community health institution was the *posyandu*, an integrated health post managed by village cadres that provided health service and support primarily to mothers and their children. The *Pos Obat Desa (POD)* was a village-based drug post also managed by village cadres that provided treatment for basic illnesses and infectious diseases. These institutions were in theory supported by qualified health staff from the *puskesmas* (sub-district health centre) or the village-based *polindes* (village birthing centre).

The project assisted with the improvement and development of 95 *posyandu*, 30 POD and around 400 village cadres.

#### *Posyandu*

In order to provide a comprehensive service the *posyandu* depended upon the active support of the health centre. Each health centre had the responsibility to carry out a number of set activities, including clinical support and regular immunisation, with a number of *posyandu* in its area of responsibility. However, there were numerous cases where government health workers lived away from their work sites and frequently did not carry out their responsibilities at the village level.

Despite these challenges, the project found that there was value in working with the community, so that basic understanding of health care and the subsequent development of health standards could be managed by the community themselves, for example, cadres were trained to teach mothers knowledge and practices that could improve the health of their family. The project found that cadres and the community were very responsive to the integrated approach of appropriate community-based health education.

In order to develop the standard of the *posyandu*, it was recognised that the project needed to counter the nation wide trend of high cadre drop-out rates. The project provided training to over 400 village cadres in *posyandu* and POD procedures, in cooperation with health officers from selected health centres and the district health office. Initial training was followed up with refresher training every three months with project and health centre staff. Cadres were trained in a range of specific modules relevant to primary health care, including the national policy on health; group dynamics; mother and children's health; nutrition; the benefits of the

government health card; family planning; immunisation; child growth and development; malaria prevention and treatment; environmental sanitation and water systems; and practical *posyandu* and *POD* procedures.

The project achieved a very low cadre drop out rate after two years of activity. In the Alor project, the drop-out rate for *posyandu* cadres was less than 20 per cent,<sup>4</sup> indicating that supervision and refresher training made a difference in terms of motivating the cadres to carrying out their responsibilities. Of particular importance was the conscious effort to ensure that cadres were participating in KSM's (a self-help group) income generation activities where they could derive some benefit from the income generation activities as a reward for their participation and commitment to their *posyandu* responsibilities.

The empowerment of the community also involved raising community awareness about their right to receive government health services. In order to bring the government health services to the village, village cadres identified that there was a need to approach the health centre staff and ask for them to attend the *posyandu* in their village. In this way, village cadres became proactive participants in health service, rather than passive (and often disappointed) recipients of government service.

“With the assistance of ACBHP, more cadres have been trained. The community now has access to more cadres and health service resources. Before ACBHP there was no *POD* and the *posyandu* cadre were not active and so it was not running very well. The activity of the *posyandu* and the *POD* is increasingly better. Now the service is much better, every month children are weighed. If the Health Coordinator doesn't turn up, we run the *posyandu* anyway” (Qualitative Evaluation in the sub-village of Retta, ABAL) (Powell 2000, p. 3).

#### *Pos Obat Desa*

The *POD* is a basic village dispensary and is seen by the national government as a temporary measure to substitute for a *polindes* or sub-health centre. With the poor reach of government health service in Alor, prior to the project there were no *POD* in the ACBHP target areas. Project staff found that the health centre was unable to provide adequate support and provision of drugs to the *POD*. In fact, in many areas there was a lack of drug supplies to the health centre itself, let alone sufficient stock to distribute to small village drug posts.

In order to overcome this problem, the project worked with some of the *posyandu* cadres to establish a *POD* themselves. They were given a grant to purchase basic drugs such as

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<sup>4</sup> It was alleged that the national drop-out rate was 50 per cent after one year of activity and may be up to 80 per cent after two years of activity.

chloroquine for malaria, headache tablets and disinfectants. The project staff assisted the cadres to monitor their supply and learn when and how to order replacement stock. The cadres were expected to operate the *POD* at sufficient profit to maintain an adequate supply for their clients. This was relatively successful with a number of *POD* maintaining sufficient funds from the sale of drugs in the village to purchase drugs through local pharmacies.

#### *Maternal morbidity and mortality*

The province of NTT had some of the highest maternal and infant mortality rates in Indonesia; with a maternal mortality rate of 750 per 100,000 live births and an infant mortality rate of 93 per 1000 live births, compared to a national average of 450 and 71 respectively.<sup>5</sup> The causes of these high rates of mortality were multi-factoral, related to a range of development issues that impact on low health standards.

A principal component of the project's integrated health program was to improve the standard of maternal and neo-natal care at the village level. Based on government and project statistics, the project can claim to have assisted in a significant decline in maternal and infant mortality, with infant deaths dropping from 76 to four and maternal deaths from 14 to two in the target areas. This was achieved through a range of training initiatives aimed at not only improving the standard of maternal care, but also the reach of service in the community.

#### *Government midwives*

There were a number of government positions for midwives at the village and the health centre level. The *bidan*, or senior midwife, held a position in the health centre, whilst the *bidan desa* (village midwife), often a young midwifery graduate, was placed in village posts or *polindes* that in theory provided village-based health service, in particular to pregnant mothers and infants. The project attempted to strengthen this service through a number of training programs.

Selected senior midwives and village midwives from Alor participated in a training for trainers course, which was based on *Life Saving Skills modules* (1995) developed by the American College of Nurse Midwives, adapted to the Indonesian context by the MOH. The training covered selected modules that focussed on the care of the mother at risk and retained placenta. This participatory, competency-based training consolidated a number of skills for the midwife participants, which were transferred into raising the standard of care provided to the community through direct midwifery assistance and the training of traditional community birth attendants.

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<sup>5</sup> The project recognised that maternal and infant mortality rates were very poorly reported. Attempts were made to address this issue in the project areas. The reliability and validity of

The project also offered courses to village midwives. One five-day course was run in the Kupang District Hospital with two doctors and an experienced *bidan* providing supervision and support. This training offered on-the-job training and clinical practice to update midwifery skills. The course did not provide an adequate level of training for new participants and recommendations were made that a longer period of time was needed to consolidate the training of new participants in practical skills.

### *The Bidan Desa*

Many health centre staff in Alor frowned upon the *bidan desa* or village midwife as lazy, uncommitted and incompetent, but the system seem to just accept this as the way it was rather than take action. This was an endemic problem in the bureaucratic system, where government officials seemed to deny responsibility for poor service and blamed the system for the problems.

A central issue affecting health service coverage at the village level was the often inadequate service provided by the *bidan desa*. Young and inexperienced *bidan desa*, often from more populated parts of Indonesia, did not have confidence in their ability to provide the health service needed in the community. This affected the level of service provided in the community, with many *bidan desa* in Alor not carrying out their job, living away from their village post and rarely visiting the village to provide a health service to the community.

“There is a polindes in the next village, in Maru village, but the new village midwife who is from Maumere, (Flores) has not yet been here. She sent a notice to us to let us know that she was coming, but the meeting with her didn’t eventuate. She didn’t turn up. We have already tried to look for her — a number of us wanted to get a KB (keluarga berencana — family planning) injection. We have heard that she has a baby and lives in Kalabahi.” (Village Cadre, Desa Pura Selatan, ABAL)

“We have a polindes in the village now, but the village midwife is rarely here. She doesn’t stay here — she lives in Taramana and only comes up to the village occasionally. It has been a long time since she was here. How do we get a midwife who will stay?” (taken from a qualitative evaluation in the sub-village of Alata, P.Altim) (Powell 2000, p. 8).

Health officials were not committed to addressing the problem of poor village midwife service. For example, the project staff attempted to obtain permission from the District Health Office to allow *bidan desa* to attend a one-month training course in Kupang. Although the project had offered to pay for a five-day *bidan desa* training course, an evaluation identified that the

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data collection procedures in Indonesia were questioned by the ANU-LIPI Project (April 1998).

course did not provide adequate time to practice clinical skills. There was a need for a longer training period where the *bidan desa* were required to demonstrate competency in a selected number of skills. The project made several proposals to the district health office to send two groups of *bidan* and *bidan desa* to Kupang for further clinical training. However, the head of district health would not allow *bidan desa* to leave their posts for a longer period of time, arguing that the community needed their services. Whilst this may have been the case, many *bidan desa* were frequently not at their post anyway because they did not feel confident in their skills and received limited supervision and support. Confidence and a renewed commitment to their responsibilities in the village could be consolidated through additional training. In not providing adequate additional training as support to *bidan desa*, the problem of poor service was perpetuated.

#### *The dukun bayi*

The *dukun bayi*, or traditional birth attendant (TBA), was the most common source of antenatal support and birthing assistance to mothers in the community, with reports indicating that almost 90 per cent of deliveries were assisted by the TBA. The fact that so many mothers relied on the TBA for assistance suggested that the government health system was not providing an adequate or appropriate service at the community level.

The project facilitated the training and frequent refresher training of at least 340 TBA from the project target areas in appropriate TBA practices. The participatory TBA training approach included training in the *three cleans*, the management of normal pregnancy, the practice of good antenatal care and the recognition and management of high-risk pregnancy. Ministry of Health training material was used, such as the MOH (1994) *Curriculum for TBAs* and the MOH (1994) *Manual for TBAs*.

The strategy of the project was to involve the TBA in regular refresher training meetings with government *bidan* and *bidan desa*. This was an important strategy to build an effective working relationship between traditional community-based health care and the formal government health sector. In some areas this saw the establishment of close relationships between the traditional birth attendant and the *bidan desa* and this improved the reach of government health service at the village level.

“The community health project in Eka Jaya has found success in the development of a good relationship between cadres, TBAs and the local HC staff. The HC’s Senior Midwife recognises the substantial gains in health standards that have been generated as a result of regular interaction with cadres and TBAs in the community. She says that training for the TBA has been especially useful and that the traditional practice of massaging the stomach of a pregnant woman is no longer practiced by the TBA as they now understand that it dangerous for the unborn baby. The number of

mothers and babies who die during childbirth is far better because the TBA know the correct procedures and they use proper birthing equipment. Every three months ACBHP come to assist with TBA training. She says that the relationship between the TBA and the *bidan desa* is now normal or routine, so that the cooperation between them will just continue. She hopes that the District Health Office will support regular cadre training in the future, but says she has doubts that they will be able to continue because the health centre just doesn't have the budget to do so" (Taken from a number of discussions during a qualitative evaluation of project activities in Eka Jaya village) (Powell 2000, pp. 8-9).

An important component of the TBA training was the education of the TBA in the importance of using clean supplies such as cotton, thread and alcohol. The project attempted to develop community awareness so that they value health services. TBA were encouraged to educate mothers in the importance of these supplies during antenatal care, so that they could prepare for the birth and the payment of the supplies. Following explanation through the TBA, many families understood the expenses involved to ensure a safe birth and payment for birthing supplies was provided by 85 per cent of families in the project areas to cover the costs of the TBA service.

#### *The impact of TBA assistance on the community*

The project approach of empowering local human resources and capacity building, especially for TBAs, was the most appropriate way to overcome high maternal and infant mortality in Alor. With 91.4 per cent of pregnant women seeking assistance from the TBA, this has had a very significant impact on the health standards of women and children in the community. Many people in the community commented that maternal and infant deaths were almost never heard of, whereas before deaths happened very frequently.

A survey of the project areas found that 17.8 per cent<sup>6</sup> of TBA assisted births were supervised by the *bidan desa*. However, only 7.6 per cent of those births had the umbilical cord cut by the *bidan desa*; an indication of the trusted role (and possible entrusted spiritual support) of the TBA. However, the *bidan desa* attendance was important to support and supervise the birth.

Moreover, the concentration of primary health care interventions at the community level saw the development of strong village based alliances between *posyandu* cadre and traditional TBA. Through these networks, the community was empowered to take a more active role in health care and this resulted in increased participation of the community in appropriate health care.

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<sup>6</sup> Although this figure appears to be rather low, the project estimate was that there was almost no assistance at the beginning of the project.

## Conclusions

This paper shows that when local community traditions, language, culture, religion and people are brought into planning and activity, aid interventions can be more effective. There are specific and contextual issues in the Indonesian health system that constrain good development and effective implementation of interventions. This project was able to manage those constraints by bringing government and community together, using appropriate and participatory methodologies for capacity building and by taking a comprehensive approach to primary health care. The outlying communities of Indonesia, and any community for that matter, have a right to appropriate health services. The community-based approach respects what is already there, works with it and adds to it with the advances in external medical knowledge. Community acceptance, participation and ownership will therefore be far more forthcoming and good health will be more sustainable.

## References

- Achmad J 1999, *Hollow Development: The Politics of Health in Soeharto's Indonesia*, Australian National University, Canberra.
- ANU-LIPI Project 1998, *Rethinking Estimates of Infant Mortality in NTB*, Policy Paper No. 3, April.
- Asia Development Bank 2001, *Country Operational Strategy: Indonesia*, March.
- Grimes B D 1997, *Health and Illness, pregnancy and childbirth: a study of cultural practices and beliefs in Alor*.
- Grimes B D 1998, *Report and Recommendations for Local health Education*, <[http://www.iied.org/sarl/pla\\_notes/index.html](http://www.iied.org/sarl/pla_notes/index.html)>, web site for Participatory Learning and Action (PLA).
- Powell J 2000, Alor Case Studies, unpublished project report.
- Rifkin S B & Walt G 1986, 'Why health improves: defining the issues concerning 'comprehensive primary health care' and 'selective primary health care'', *Social Science and Medicine*, vol. 23, no. 6, pp. 559-66.