

**JAYAWIJAYA WATCH PROJECT -  
KANGGIME EXTENSION**

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**BI-MONTHLY REPORT**

**FEBRUARY / MARCH 2000**

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## **INTRODUCTION**

### ***i. Political and social developments in the project target areas:***

During February and March 2000, the atmosphere in Papua Province remained shrouded in uncertainty. Numerous rumours circulated regarding the aspirations of many Papuans to “reclaim their sovereignty which was taken by force” by the GOI in 1963. Despite this situation project activities have continued in both Kanggime and Kembu/Mamit Sub-Districts. The main concern for project staff entering the project target areas has been the arrival of “SATGAS PAPUA” or Papuan Independence Cadres in the target areas. Most of these SATGAS PAPUA Cadres are Lani people from the Ilu, Ilaga and Sinak Sub-Districts in neighbouring Puncak Jaya District. They have been conducting recruitment activities in Kanggime and Kembu / Mamit and amongst those who have chosen to join this group are a number of WATCH Project CD Cadres. This situation has meant that a number of planned activities amongst the CD groups have not gone ahead due to the new activities in which some cadres have been involved.

The 1<sup>st</sup> of May 2000 is a significant date as this is the anniversary of the Act of Free Choice which marks the formal transfer of sovereignty over Papua / Former Netherlands Nieuw Guinea from the Dutch Colonial Administration to the Government of the Republic of Indonesia. It is still unclear what, if anything, will transpire on or around this date. However, the atmosphere in Wamena and other parts of Papua is tense with expectation, fears and rumours spreading throughout both urban and rural communities. In this climate of uncertainty the WATCH Project has continued to implement project activities but has anticipated any problems by reducing unessential travel to or in the target areas, maintaining close monitoring and analysis of the situation and by establishing contingency plans in case of emergency.

### ***ii. Major activities implemented:***

The main activities undertaken during February – March 2000 were as follows:

- The WATCH Health Coordinator conducted a field visit to Kanggime Sub-district where she carried out supervision of three (3) village midwives, five (5) Traditional Birth Attendants (TBAs), ten (10) POD cadres, six (6) Posyandu cadres and two (2) BP cadres from seven (7) Desa as well as staff of the Kanggime Puskesmas.
- Meetings were held with the target communities in Kanggime to discuss and facilitate preparations for the construction of suspension footbridges and water conservation and supply systems.
- The Information, Education and Communication (IEC) materials which were recently prepared and published by WATCH were distributed to appropriate people throughout the target areas. WATCH personnel also continued work on preparing further IEC materials including a book mark on “Warning signs for husbands/fathers” and a handbook on “Sweet potatoes processing technology” which is being jointly produced and published with the national newspaper KOMPAS.
- The Jayawijaya Health Information System (HIS) was reviewed by an independent consultant, Drs. Abdul Wahab, who also carried out revisions and alterations on the HIS

database software and conducted a training workshop for Puskesmas record keeping and reporting (SP2TP) personnel;

- The WATCH Training Officer conducted training in food preparation and appropriate food processing technology at six locations in Kanggime Sub-district.
- WATCH Community Development personnel conducted LEISA Training for 18 CD groups in Kanggime and 16 in Kembu / Mamit. Self-reliance and nutritional starter packages were also distributed to these CD groups and supervision of the progress of CD groups was also carried out.
- The cadres who are participating in the second exposure and skills training trip to the Living Environment Education Centre (PPLH) in East Java were selected, prepared (including a four-day pre-departure induction in Wamena) and finally dispatched to East Java on the 24<sup>th</sup> of March 2000;
- The Mid-Term Survey was organised and implemented.
- The Project Manager and counterpart manager attended a Project Coordinating Committee (PCC) Meeting in Alor in mid March.

### ***iii. Major problems experienced:***

During February – March 2000 WATCH personnel have observed a considerable shift in community perceptions towards a number of project activities whereby many community members are coming to view the project as a “*bringer of cargo*” rather than a support for community self-help initiatives.

This shift in community perceptions was most apparent in relation to the preparations for the second cadre exposure and training trip to East Java. Experience from the first Cadre exposure trip five months ago indicated that many cadres were very keen to join such exposure trips. However, in the lead up to the current exposure trip a total of 14 out of the 22 cadres who were planning to join the trip dropped out. A wide variety of reasons were given for dropping out ranging from illness amongst the cadres and/or their children through to fears that something would happen on the 1<sup>st</sup> of May and they would not be able or allowed to return to Papua. Furthermore, the cadres who dropped out of this trip urged WATCH to use the funding that would have been spent on the trip to provide starting capital to their CD groups instead. Although it would seem fairly clear that the present political uncertainty has contributed to this abnormally high drop out rate it is also believed that internal social interactions (most particularly a number of individuals within the community tried to discourage other from participating) and the opportunism and/or greed of some of the cadres were significant contributing factors. Ultimately replacements were able to be found for most of those people who withdrew from this activity and a total of eighteen (18) cadres from Kanggime and Kembu / Mamit were sent to East Java for the exposure trip.

The problem of shifting community perceptions towards project activities was also experienced by the Training Officer whilst conducting appropriate food processing technology training. During these training sessions a high number of participants urged WATCH to provide material assistance in the form of pots, hand mills etc. This is perceived as indicating a major shift in community perceptions as two years ago community development groups from

Kanggime were very proactive in this area to the extent of sending money to the WATCH office in Wamena so that WATCH could purchase such equipment and send it to them.

A problem was also experienced in relation to the construction of suspension footbridges and water conservation and supply systems in Kanggime. Basically there is a conflict between the managerial imperative (ie. that these these activities should be completed within the set timeframe), and the community development / capacity building imperative (which dictates that a high level of community participation in such activities is more important than the actual physical outcomes). As a result of the fact that the target communities are deemed to be as yet unready for full participation in these activities WATCH has been forced to extend the timeframe allowed for the implementation of these activities.

## COMPONENT I - MATERNAL AND INFANT HEALTH

### OUTPUT 1 - APPROPRIATE MATERNAL AND INFANT HEALTH PROGRAM CONSOLIDATED

#### 1.1 PROMOTE REGISTRATION ON MATERNAL HEALTH

##### 1.1.1 Promote registration of all pregnancies

###### *i. Discussion:*

According to the target levels of service provision of the Indonesian Health Care System women across Indonesia should receive, as a minimum level of health care services, four antenatal checks during pregnancy. Each of these visits is designated K1 through to K4 and should occur at a different stages throughout the pregnancy. The K1 visit should take place during the first trimester of pregnancy, the K2 visit during the second trimester and the K3 and K4 visits both occurring during the third trimester. During each of these visits pregnant women should receive a minimum level of antenatal services according to the 5T system. The five Ts are as follows:

1. **Timbang dan Tinggi** : Weight and height measured & recorded
2. **Tekanan Darah** : Blood pressure should be checked
3. **Tinggi Fundus Uteri** : Womb expansion should be measured
4. **Tetanus Toxoid Vaccination** : Tetanus vaccinations should be given
5. **Tablet Tambah Darah** : Iron and and sodium tablets should be provided to aid red blood cell production.

The health service in Jayawijaya has experienced difficulties in trying to apply these service standards and not been able to achieve these target levels of service provision for a range of reasons.

According to the conceptual models of highland Papuan people, a woman is not considered to be pregnant until such time as the baby begins to noticeably move around in the womb. This usually occurs at about the 12<sup>th</sup> to 14<sup>th</sup> week of pregnancy or well into the second trimester. It is therefore extremely difficult to convince women to make a K1 visit during the first trimester when she and most other people in her community do not consider her to be with child until well into the second trimester. Therefore, the first visit to the health workers by most women in Jayawijaya does not fulfil the specific criteria of the K1 visit as it occurs to late. This has caused considerable confusion in the recording of ANC visitation records with health workers unsure whether these should be recorded as K1 or K2 visits.

On the 3<sup>d</sup> of March WATCH Personnel convened a meeting to clarify the definition of K1-K4 antenatal checks to be used for the Jayawijaya Health Information System (HIS) This meeting was attended by Puskesmas SP2TP workers, Puskesmas midwives, and staff from the District Health Service Women and Children's health section. There were two possible definitions which could be applied to the K1-K4 ANC visits.

- The first possible definition would link the K1 to K4 designations to the stage of the

pregnancy during which they occurred. Using this definition, if a woman made her first ANC visit during the second trimester then it would be considered a K2 visit even though it was her first visit.

- The second possible definition would simply apply the K1 to K4 designations sequentially. Using this definition, if a woman made her first ANC visit during the second trimester then it would still be considered a K1 visit. The application of this definition to the situation in Jayawijaya would have the opposite effect on statistical outputs to the definition outlined above with statistics for K4 visits being very low in comparison to statistics for K1-K3 visits.

The outcome of this meeting was that, even though the first definition is of greater utility for observing trends in antenatal care, the constraint of poor education levels amongst the health workers and volunteers who would have apply this definition at the village and sub-district level, meant that the second definition had to be adopted.

**Table 1. Results of K1 and K4 ANC Visitation Levels in the Period January – December 1999**

PUSKESMAS	K1/AKSES IBU HAMIL		K4 (COMPLETE ANC)	
	TARGET	RESULT	TARGET	RESULT
Kanggime	90 %	47.3%	85 %	10.3 %
Mamit	90 %	48 %	85 %	38.46 %

**ii. Conclusions :**

During the discussions held during this meeting a number of issues were highlighted as significantly contributing to the poor standard of antenatal care services in Jayawijaya. These issues could be related to either the perceptions, behaviour and attitudes of the pregnant women or the poor knowledge, practice and equipment of midwives.

**a. Pregnant Women**

- According to local concepts of physiology and child development a woman is not considered pregnant until such time as the baby begins to noticeably move around in the womb;
- As a result of this the first (K1) antenatal visit does not usually occur until the 12<sup>th</sup> week of pregnancy or later (during the 4<sup>th</sup> or 5<sup>th</sup> month / second trimester);
- Local women have a poor understanding of the concept of high risk pregnancy and the effects of different diseases on pregnant women and their developing babies;
- Many women still prefer to consult traditional birth attendants rather than midwives.

**b. Midwives**

- Puskesmas and village midwives still generally have a poor knowledge regarding the delivery and management of Maternal health care services including the K1 – K4 ANC

visits, diagnosis and monitoring of high risk pregnancies and general maternal health diagnostic techniques;

- As a consequence of the low level of knowledge amongst midwives regarding the delivery and management of Maternal health care services they are unable to understand the purpose or significance of monitoring systems and the indicators used to measure the effectiveness of the maternal health care programs;
- Furthermore, the poor level of knowledge amongst midwives means they cannot fully understand the importance of data recording and reporting activities for the planning of Maternal Health Service programs both at the Puskesmas level and the District level. This contributes to poor communication with the Puskesmas, breakdowns in the supply of pharmaceuticals and the overall poor quality of the maternal and infant health programs.
- The constraints of poor equipment, facilities and logistics means that the 5Ts standard of antenatal care cannot be properly implemented. For example, it is common to find that equipment such as tensimeters and scales are either missing or broken whilst programs such as the maternal tetanus vaccination are often stalled due to logistical problems;

#### 1.1.2 Promote registration of all deliveries assisted by midwives

**Table 2. Achievement of targets for Midwife Assisted Deliveries in Kanggime and Kembu / Mamit for the period January – December 1999**

PUSKESMAS	TARGET	RESULTS - 1999
Kanggime	85 %	40.5 %
Mamit	85 %	48.6 %

*Source: Kanggime and Mamit Puskesmas Records*

#### *i. Comments:*

From the data in table 2 it is clear that the levels of antenatal care visits to trained midwives by pregnant women in Kanggime and Mamit Sub-districts are still much lower than the target levels of ANC visitation. The results of the mid-term survey showed that the vast majority (95%) of women still give birth at home whilst the remaining 5% attend either the Polindes, Posyandu, District Hospital, the village midwives home or other places. It also showed that only 32% of pregnancies were attended by trained midwives, 26% were attended by family members, 10% were attended by traditional birth attendants (70% of whom have now received some training), 3.4% were attended by other medical personnel and in 28.6% of cases the baby was said to have been delivered by the woman alone.

#### *ii. Conclusions:*

These results show that the communities acceptance and utilisation of trained midwives and nurses as birth attendants is still very low and their willingness to formal health facilities is extremely low. Interviews and discussions with local women revealed a number of reasons why women were still reluctant to use formal health facilities and trained health personnel during childbirth. Such reasons included:

- The distance from the woman's place of residence to the nearest health facility, midwife or nurse was too great for it to be practical to relocate a woman during the early stages of pregnancy;
- Most women expressed that they felt safer in the care of close female relatives or senior traditional birth attendants. This is presumably related to beliefs in the role of ancestor spirits in child birth and development;
- The fees charged by midwives and nurses were too high;
- Midwives and nurses are often not available at their designated post when childbirth begins. For example, the village midwife in Egoni lives at Kanggime and walks to and from Egoni each morning and evening. Thus women going into labour during the evening or night can only obtain trained assistance with considerable effort and generally at increased cost.

### 1.1.3 Promote registration of all infant births

Based upon the "Child health recommendations of 1999" 286 babies in the Puskesmas in Mamit and 343 babies in the Kanggime Puskesmas should be registered and receive or possess an Infant Health Record Card (KMS).

**Table 3. Number of births attended Health Workers and Traditional Birth Attendants during the period January to December 1999**

PUSKESMAS	NUMBER OF CHILDBIRTHS ASSISTED BY :			
	TRAINED HEALTH WORKERS		TRADITIONAL BIRTH ATTENDANTS	
	NUMBER OF BIRTHS	%	NUMBER OF BIRTHS	%
Kanggime	146	40.5 %	47	13
Mamit	139	48.6 %	73	25.5

#### *i. Conclusions:*

The data relating to health worker assisted deliveries in the two sub-districts is recorded by both trained health workers and traditional birth attendants. The next questions that should be asked are:

- What percentage of those babies who are registered at birth are subsequently brought to the Posyandu to be weighed and checked each month?
- Of those babies who are taken to the Posyandu, how many receive an Infant Health Record Card (KMS) and how many of them retain the cards for any length of time?

The results of the mid-term survey showed that only 14.4% of children surveyed had a KMS card, 63.1% said they had not received KMS cards, 8.5% reported that they had received the cards and subsequently lost them whilst 14% said the cards were stored with the Posyandu Cadres or elsewhere. Health cadres and workers on the other hand claimed that they could not properly carry out the distribution of KMS cards due to regular problems with obtaining supplies of cards through the Puskesmas.

### 1.1.4 Promote registration of all maternal and infant mortality cases

According to the Village Midwives in Papari and Kumbur, the POD cadres, TBAs and Posyandu Cadres under their supervision reported that there were no maternal or infant deaths.

According to reports of the Nabunage Village Midwife there was only one case of Intra Uterine Foetal Death (IUFD) which was caused by a breach birth.

According to L2 Reports from the Kanggime Puskesmas there was one case of infant death in the Desa Jingguga during February. The causes of this death are as yet unclear and the Health Coordinator and Project Midwife intend to conduct a verbal autopsy with the Jingguga Village Midwife during their next field visit.

*For further data relating to the registration of maternal and infant health please refer to Tables 1a-b, 2, 3, 4a-b in Annexe 1.*

**1.2 DISTRIBUTE IRON TABLETS, PYRANTEL PAMOAT AND CHLOROQUINE**  
*(Refer to Tables 5a-b in Annexe 1.)*

At this point in time the supply of Pyrantel Pamoat tablets which were distributed by the project to the midwives has already run out. Midwives still have supplies of chloroquine and continue to distribute it on a weekly basis.

**1.3 IMMUNISE ALL INFANTS (0 –11 MONTHS)**  
*(Refer to Tables 6a-b in Annexe 1)*

*i. Conclusions:*

Based upon the monthly reports on the immunisation program which are sent by Kanggime Puskesmas to the P2M section of the District Health Service, it can be said that, at least on paper, the Kanggime Sub-District Immunisation Program is achieving satisfactory levels of coverage. However, when the Project Health Coordinator made a visit to Kanggime and Kutime in March 2000, POD and Posyandu cadres as well as CD group members reported that between July 1999 and March 2000 the Puskesmas staff had not conducted any immunisation activities in these areas. The results of the mid-term survey showed that 63.8% of children had been immunised, 14.4% possessed a KMS card and 63.1% said they did not have a KMS card. This situation shows that although health reports submitted to the District Health Service may seem to meet or come close to the required service standards, in practice activities are not always implemented and/or some areas are not properly serviced.

**1.4 CONSTRUCTION OF SUSPENSION FOOTBRIDGES  
& WATER CONSERVATION AND DISTRIBUTION INFRASTRUCTURE**

Prior to the commencement of the construction of footbridges, WATCH convened a meeting which was attended by representatives of the Sub-District Administration, church leaders, members of the WATCH CD groups and members of the broader community. This meeting was held at the Immanuel Church in Kanggime on the 24<sup>th</sup> of January 2000. The purpose of this meeting was to explain to the community that the infrastructure development projects were not government projects but were community activities. The importance of the communities' contribution in terms of supplying local materials, labour and most importantly in ongoing maintenance of the infrastructure was strongly emphasised in this meeting.

The infrastructure, which will be constructed, includes:

- Fresh water spring conservation and water distribution facilities in Desa Kanggime;
- One suspension foot bridge in Desa Kumbur – Parari;
- One suspension foot bridge in Desa Wuluk;
- Rain water cisterns / storage tanks in Desa Kutime using discarded aviation fuel drums.

**i. Opening Presentation by WATCH Personnel:**

To open discussions in this meeting WATCH personnel explained that the construction of foot bridges and water storage / conservation facilities are activities designed for the benefit and in order to meet the needs of the community in the Kanggime Sub-District. WATCH offered to assist the communities with the construction of bridges at Kumbur – Parari and Wuluk and water facilities at Kanggime. WATCH offered assistance only in the form of imported materials such as cement, steel cable, wire and pipes whereas the community were expected to contribute all local materials such as timber, stone, gravel and sand. Labor would also be the responsibility of the community as would the actual organisation and implementation of construction activities.

**ii. Results of Discussions in the meeting:**

- The community agreed to accept WATCH's offer of assistance and thanked project personnel for this offer;
- The communities were willing to supply the required local materials;
- Responsibility for organising and overseeing these projects was given to the Kepala Desa of the three target Desa;
- A local artisan should be employed to take responsibility for the actual construction of the two bridges. It is hoped that a suitably skilled person who is willing to do this work at a reasonable cost can be found from within the inhabitants of Kanggime. This was the case in Kembu / Mamit where the community requested that Lingge Bembok be awarded the contract for construction of suspension bridges.

**iii. Suggestions:**

- According to the local community members the construction of water conservation and distribution facilities in Kanggime was desperately needed. They also suggested that the system should include two distribution tanks, one located above the airfield and one located below it;
- The pipes leading from the storage tanks to the distribution tanks should be thick and of good quality so that it would not break quickly;
- The community members suggested that WATCH should organise an artisan to undertake the work and WATCH should maintain responsibility for the paying the artisan.

**iv. Comments:**

In the case of the community infrastructure development activities, ie. construction of suspension footbridges and water conservation and supply systems, WATCH faces a dilemma between the imperatives of rigid project timeframes and the need to create strong community ownership of the infrastructure. The usual government method for local infrastructure development projects is to drop the materials on site and pay the local communities for local materials and labour whilst all project planning and management is carried out in Wamena, Jayapura or beyond. This type of approach to community infrastructure development is technocratically efficient in as much as that given good project planning and management and the absence of extraordinary circumstances, projects can usually be completed to a reasonable standard of workmanship within the project timeframe. However, this type of approach has been deemed inappropriate or even antithetic in the context of the WATCH Project with its goal of developing a *sustainable* model for PHC intervention. These types of approaches are highly unlikely to achieve any real degree of sustainability due to the fact that community involvement is reduced to that of low paid labourers and suppliers of cheap local materials. Their exclusion from the realms of project planning and management means that the resulting infrastructure may be inappropriate or mistarget the needs of the community. It also means that communities are likely to perceive the infrastructure as being “*barang pemerintah*” or government things, and will therefore not fully utilise or maintain it. WATCH has employed participatory approaches to its suspension bridge and clean water programs viewing the development of social infrastructure as being of equal or greater importance with the development of the physical infrastructure.

These approaches entail facilitating a high degree of community involvement in the planning, construction and maintenance of the bridges and water supply systems. They also require considerable inputs from field personnel and group leaders and are reliant upon the ability of the group to sufficiently organise themselves and incorporate / acculturate the new infrastructure. This can be a time consuming process, which cannot easily be sped up without negatively impacting on community attitudes towards and participation in the activities and their feelings of ownership of the outcomes. WATCH has taken the attitude that the readiness of the target communities to fully participate and assume ownership of the activities and their outcomes *must* take precedence over the dictates of project implementation timeframes. Therefore, upon evaluation of the target communities’ in Kanggime readiness it was decided that the implementation of suspension bridge and water supply construction activities must be postponed.

## **Output 2 - Capacity of Health System, Staff and Community Strengthened**

### **2.1. DEVELOP AND EXPLAIN SUPERVISORY SYSTEM TO HEALTH STAFF/POD CADRES**

#### **2.1.1 Supervision of Midwives**

During March 2000 the WATCH Health Coordinator visited Kutime, Kupara/Parari and Nabunage in order to carry out supervision of the village midwives located in these Desa. These visits resulted in a number of findings as outlined below:

##### *i. Problem:*

The majority of village midwives in the Kanggime Sub-District are not yet implementing maternal and infant health care services which meet the desired standard.

##### *ii. General Constraints:*

- The village midwives have a poor understanding of the minimal standard of antenatal care services which every pregnant woman should receive (the 5Ts - see section 1.1.1 of this report). As a result most village midwives in Kanggime Sub-district have not attained this standard of service.
- The village midwives have a poor understanding of the concepts, procedures and practices relating to the management, planning and monitoring of maternal and infant health care activities;
- Village midwives still have a very poor understanding of the concepts and techniques of obstetrics and neonatal care;
- The Polindes has only recently been completed in Desa Nabunage. The Polindes in Kumbur is currently under construction whereas work has not yet commenced on the construction of a Polindes building in Desa Kupara / Parari. The main problem cited as slowing down progress in the construction of Polindes was the difficulty in sourcing suitable cut timber for these buildings.
- The village midwife allocated to Desa Kupara / Parari is often absent from her post as she lives in the neighbouring Desa Kutime. This may be a factor contributing to the communities tardiness in relation to the construction of a Polindes building in Kupara / Parari;
- The system whereby the trained TBAs submit written reports and health statistics to the village midwives is not yet functioning effectively. Both the vertical and horizontal reporting and data recording systems remain dysfunctional.
- The Tetanus Toxoid Immunisation Program which should be implemented by Kanggime Puskesmas personnel has not been implemented in these three desa since July 1999;
- The Summary Health Data Reports (PWS) based on Maternal and Infant health program records at the village level are not yet being properly utilised by Puskesmas personnel for analysis of the situation, planning and the development of ongoing programs. Consequently, this reinforces the widely held perceptions amongst village midwives and TBAs that the reports which they are required to submit are useless or only exercises in controlling and monitoring the performance of health workers.

##### *iii. Constraints relating to the Jayawijaya District Health Service Maternal and Infant Health Section:*

- The formal health service is limited in the control it has over the activities of village midwives and TBAs. They do not have the power to impose sanctions against village midwives or TBAs;
- They do not have the resources to ensure the well being of midwives. In particular, the wages of midwives are often late, which in turn encourages higher absenteeism from their posts amongst midwives who are off searching for their wage or trying to find other means to subsist.
- The supervision and monitoring of village midwives by the Maternal and Infant Health Section is still very poor. This means that the problems experienced by village midwives, which might be anticipated or overcome with targeted assistance from the District Health Service generally, go unnoticed. The Puskesmas personnel also complained that they did not receive feedback from the Maternal and Infant Health Section after submitting reports.

*iv. Constraints on WATCH personnel supervising village midwives:*

WATCH personnel have also found difficulty in carrying out supervision of village midwives, particularly in trying to uncover and analyse what kinds of problems / constraints the midwives are working under:

- The midwives are often reluctant to openly and honestly discuss the problems and difficulties, which they encounter when Project personnel question them. Presumably, they believe that any admission of the existence of problems could subsequently be used against them;
- It is difficult to maintain communications with the head of the Kanggime Puskesmas when the head of the Puskesmas is rarely available at the Puskesmas.

*v. Steps that have been taken by WATCH to alleviate these problems:*

- Technical support has been extended to village midwives especially in relation to antenatal, obstetric and neonatal care concepts, techniques, practices and case management;
- Monthly antenatal care and birth report forms (LI1 and L2) were distributed to the Puskesmas midwives and reporting forms covering maternal and infant health records from the Posyandu were distributed to the village midwives. The Puskesmas and village midwives were also given training in how to correctly complete these report forms;
- Target numbers for pregnant women, infants, babies and infants have been distributed to the village midwives. Pregnancy prediction pocket charts were distributed to midwives and training was provided in their correct usage. These charts are made up of a series of pockets for the different months of the year. These pockets are appropriately sized for holding maternal health record cards so that midwives can place the maternal health card of each pregnant woman she is treating into the pocket for the month when she is expected to give birth. Midwives have claimed that these pocket charts were a significant aid to them in keeping track of pregnancies and antenatal checks;
- Traditional Birth Attendants have been trained in the basic data recording and reporting system. Unfortunately, the results of this training have not yet been satisfactory;
- WATCH personnel have also maintained close communication and coordination with the District Health Service Maternal and Infant Health Section in attempts to overcome problems related to the village midwives and to try to bridge the communications gap between the village level and the district level.

*vi. Suggestions:*

- The village midwives who have already received funding for the construction of a Polindes should ensure that these buildings are completed as quickly as possible. The District Health Service Maternal and Infant Health Section must take steps to exercise their authority and impose sanctions upon midwives who have received funding for the construction of a Polindes but who have failed to make any serious attempt to ensure the work is completed in a reasonable period of time;
- The District Health Service and the Puskesmas should try to fully utilise the results of the supervision of village midwives and take further steps to overcome the problems that have been observed in the management system for maternal and infant health care;
- The provision of a “Cold Chain” to the Pustu in Parari would be highly beneficial. This would allow Pustu workers to implement immunisation activities and thus decrease reliance upon, and the workload of, staff of the Kanggime Puskesmas;
- The Head of the District Health Service should take steps to ensure that the heads of Puskesmas remain at their post as much of the time as possible. Recalcitrant Puskesmas heads should be sanctioned to encourage higher rates of attendance at their posts;
- The Head of the District Health Service should attempt to ensure the well being, and in particular the timely payment of wages to village midwives and other health workers.

### **2.1.2 Supervision of Traditional Birth Attendants (TBAs)**

A total of five TBAs were also supervised during this visit. These five TBAs were also

given further technical training at this time. The following tables show the results of this supervision. Table 1 shows the identity of the TBAs, their education levels, their possession / maintenance of Birthing Kits, etc. whereas Table 2 shows their responses to questions regarding maternal and infant health care.

**Table 1. Identity and background of TBAs supervised in Kanggime during February – March 2000**

NAME OF TBA	LOCATION	EDUCATION	TBA'S KIT	DURATION OF SERVICE	TRAINED BY WATCH
Dago Wanimbo	Kutime(Desa Kupara/Parari)	SAM Junior Bible School	Not present	Over 3 years	Yes
Totina Genongga	Lerewere(Desa Egoni)	Kejar Paket A	Not present	Over 3 years	Yes
Depa Wanimbo	Bambuk(Desa Kupara/Parari)	Kejar Paket A	Not present	Over 3 years	Yes
Arina Gurik	Wuluk(Desa Wuluk)	SDPrimary School	Not present	Over 3 years	Yes
Yambegukban Wanimbo	Pindelo(Desa Kupara)	SAM Junior Bible School	Not present	Over 3 years	Yes

*Note: SAM or the Junior Bible School is equivalent to a Primary School Education.*

**Table 2. TBAs knowledge regarding the 3Bs, ANC, neonatal care, etc.**

KNOWLEDGE	TOTINA GENONGGA	YAMBEGUKBAN WANIMBO	DAGO WANIMBO	ARINA GURIK	DEPA WANIMBO
3Bs Clinical Sanitation Practices	Understood	Understood	Understood	Understood	Understood
Antenatal Care	The TBAs know and understand the signs of pregnancy. Pregnant women do not often seek medical assistance until they are 4 or more months pregnant.				
Antenatal Care Visitation	TBAs said pregnant women should have antenatal examinations at least twice during pregnancy.				
High Risk Pregnancies	Didn't Understand	Didn't Understand	Didn't Understand	Didn't Understand	Didn't Understand
Birth Assistance Practices	Bamboo knives are used to cut the umbilical cord and local bark fibre string is used to tie it off.				
Complications in Pregnancy and Childbirth	Overdue pregnancies, breach and posterior births, placental retention. Complicated cases should be promptly referred to village or Puskesmas midwives.				
Post natal visits	Visits conducted	Visits conducted	Visits conducted	Visits conducted	Visits conducted
Names of Immunisations	Knew	Didn't Know	Didn't Know	Didn't Know	Didn't Know
The Purpose Of Immunisations	Knew	Knew	Knew	Knew	Knew
Adequate nutrition intakes for Pregnant Women	All of the TBAs understood the importance of eating plenty of nutritious food during pregnancy but the frequency of meals remains at two meals per day.				
Initial Weighing of New Born Babies	The initial weighing of babies is not usually carried out because most TBAs do not have scales.				
Risks for Low Birth Weight Babies (Less than 2 kg)	Understood	Understood	Understood	Understood	Understood
Infant Diseases	Diarrhoea, difficult breathing, cough and other respiratory infections				
Age at Which Weaning of Babies Can Commence	3 Months	3 Months	4 Months	3 Months	3 Months
Appropriate types of Weaning Foods	Banana, mandarines, sweet potatoes and eggs.				
Method for preparing sweet potato flour	Knew	Knew	Knew	Knew	Knew
Method for Preparing Superoralit	Did not know	Knew	Knew	Did not know	Knew
Supply of Sweet Potato Flour Stored	No	No	No	No	No
Recording & Reporting	Recording and reporting by TBAs is very limited. It is generally restricted to the patient's name, date of treatment and date of delivery.				

*i. Conclusions:*

**Birth Attendants Kit**

- In order to raise the safety and sanitation standards of midwifery / birthing practices the TBAs must be equipped with proper equipment including scissors, gloves, and artery clamps. The TBAs must also receive ongoing training in maintenance, safe storage and sterilisation of their equipment so that it will last for a long time and not be a source of cross infections;

**TBA's Knowledge**

- The low formal education standards and poor Indonesian language skills of most TBAs means that the rate of transfer of technical knowledge through training activities and programs is extremely slow;
- There are still some TBAs who initiate courses of treatment, which are beyond their competence and / or formal authority such as trying to rearrange the baby's position externally.

*ii. Recommendations:*

In order to ensure the continued implementation and improvement of the current standards of maternal health care services, the Puskesmas and village midwives must take a more active role in supervising and training the TBAs in their work area. Such supervision and training should cover a wide range of technical skills including how to detect high-risk pregnancies and when to refer patients to the midwives, clinical and sanitary skills and recording and reporting methods. Technical supervision and training given directly in the workplace is considered to be far more effective than large training workshops even though the fewer TBAs can be trained at once.

**2.1.3 Supervision of POD Cadres**

A total of 10 POD cadres from Kutime, Bambuk and Wuluk were supervised during this period. WATCH personnel also gave the cadres additional technical training regarding the symptoms of malaria, diarrhoea and pneumonia, recording and reporting methods and basic sanitation. Diagnostic and medication folders for malaria, diarrhoea and pneumonia were also distributed, as were report forms for the POD's monthly pharmaceutical reports.

**Table 3. Identity of the POD Cadres supervised during February – March 2000**

NAME OF POD CADRE	LOCATION OF POD	DESA	CD GROUP MEMBER	TRAINED BY WATCH
Pular Wanimbo	Kutime	Kupara/Parari	Yes	Yes
Anis	Kutime	Kupara/Parari	Yes	Yes
Diep	Bambuk	Kupara/Parari	Yes	Yes
Baibunggen	Nabunage	Nabunage	Yes	Yes
Birimus Gurik	Wuluk	Wuluk	Yes	Yes
Anas	Wuluk	Wuluk	Yes	Yes
Yeni Wanena	Wenggume	Erugwi	Yes	Yes
Karel	Wondame	Yaliwak	Yes	Yes
Yelimus	Dolonggun	Egoni	Yes	Yes
Dani	Lerewere	Egoni	Yes	Not yet

**Table 4. Cadres knowledge concerning pneumonia, malaria and diarrhoea and basic practices for POD cadres**

CADRE'S NAME	GENERAL KNOWLEDGE (PRACTICAL)	PNEUMONIA	MALARIA	DIARRHOEA	TOTAL SCORE
Pular Wanimbo	10/50	10/90	30/110	30/70	80/320
Anis	0	10/90	20/110	0	30/320
Diep	30/50	50/90	20/110	50/70	150/320
Baibunggen	10/50	40/90	20/110	20/70	90/320
Birimus Gurik	30/50	70/90	110/110	60/70	270/320
Anas	0	40/90	20/110	20/70	80/320
Yeni Wanena	30/50	50/90	60/110	60/70	200/320
Karel	40/50	70/90	90/110	70/70	270/320
Yelimus	30/50	70/90	70/110	50/70	220/320
Dani	20/50	70/90	100/110	70/70	260/320

**i. Conclusions:**

From the data in the above tables it can be seen that:

- Over 60% of the Cadres were able to display an adequate understanding and knowledge of the differences between pneumonia, severe pneumonia and other respiratory infections. In terms of treatment of severe malaria there are still some problems with some cadres still

administering injection of penicillin Procaine when they should in fact be referring them directly to the Puskesmas;

- Only 50% of the cadres tested displayed adequate knowledge and understanding of malaria. Nearly all of the cadres were able to diagnose malaria but most were still confused regarding the different dosages of chloroquine for different age groups and how malaria spreads and can be prevented through reducing anopheles mosquito breeding sites around the home / village;
- The cadres' knowledge and understanding of diarrhoea is generally adequate. The main problem area is in regards to how to prepare sweet potato flour and super-oralite. Cadres know of the usefulness of these preparations in treating diarrhoea but they have not adopted the preparation, storage and regular usage of super-oralite into their practices;
- The cadres generally knew how to read scales, wash their hands, give injections and sterilise equipment. The main problem area for general practice skills is the counting of breaths per second. Given the low numeracy skills of most cadres this is not surprising.

Upon completion of this supervision WATCH personnel provided further refresher training to the cadres. This training covered the 3 main diseases, the method for preparing sweet potato flour and super oralite, the correct way to wash hands, the method for counting breathing rates and correct recording and reporting procedures. The subject matter covered in this refresher training was based upon materials from the POD Cadre Training Manual (Buku Kader POD) which was recently prepared by the WATCH health team. These POD Cadre Training Handbooks were also distributed to the cadres at this time.

#### *ii. Recommendations from the Cadres:*

During the course of the supervision and refresher training activities the POD cadres made a number of suggestions or recommendations for possible future courses of intervention which WATCH might take to help them overcome some of the difficulties which they face. These suggestions included the following:

- The types of diseases covered in POD cadre training should be expanded to include other locally common ailments such as intestinal worms and skin diseases;
- The recording and reporting forms for diseases and pharmaceutical usage reports which will be sent to the Puskesmas should be distributed directly to the POD cadres;
- WATCH should conduct a special training course focusing on recording and reporting and in particular on how to complete the pharmaceutical usage reports;
- WATCH should help to purchase pharmaceuticals / pay reimbursements to the District Health Service so that supplies of pharmaceutical's would be more reliable;
- WATCH should help by providing saucapans to use to sterilise medical equipment.

#### **2.1.4. Supervision of Posyandu Cares**

A total of six Posyandu cadres were supervised. The cadres knowledge regarding the different types of immunisations and the purposes/benefits of these immunisations as well as their

ability to properly complete Infant Health Record Cards was still poor. Knowledge regarding nutrition was acceptable. Some cadres had even food supplements in their posyandu. Not all of the cadres supervised could describe the correct method for preparing sweet potato flour and super-oralite. None of the cadres had ever practiced making sweet potato flour or super-oralite. They claimed that this was due to the lack of appropriate equipment.

### **2.2.1. Supervision at the Puskesmas Level**

#### ***i. Immunisation Program***

According to reports from village midwives, POD cadres, TBAs, Posyandu cadres and CD cadres, the immunisation program in desa Kupara and Nabunage was not implemented between July 1999 and March 2000. According to Puskesmas personnel the required immunisation activities are implemented every month, the results are recorded and the appropriate monthly reports are submitted to the District Health Service.

#### ***ii. Recording and Reporting***

- The SP2TP staff, responsible for maintaining health centre records and reporting, are not always present at the Puskesmas;
- The Puskesmas has run out of LB1 forms therefore the Puskesmas has not been able to prepare an LB1 report for the month of February 2000;
- According to the Puskesmas personnel POD cadres often fail to submit monthly disease reports whereas the POD cadres claim that their reports are submitted to the Puskesmas each month;
- There is often no data covering deaths for inclusion in the LB2 reports. The Puskesmas personnel claim that they rarely receive reports of deaths from POD cadres or other community members. The POD cadres and TBAs that they always send reports to the Puskesmas in cases of death;
- The pharmaceutical usage and requirements (LB4) reports have not been completed since November 1999. This is due to the fact that the Puskesmas has run out of LB4 forms. According to the Puskesmas staff they are already running very short on pharmaceutical supplies.

### **2.2.2. Supervision at the Polyclinic (BP) Level (BP Kutime)**

Supervision was conducted at the Kutime BP. This BP is staffed by one mantri / nursing assistant and 3 BP cadres. Of these personnel only two of the cadres were present at the time WATCH personnel visited. At this time the situation at the Kutime BP was found to be of considerable concern. The main problems, which became apparent as a result of this supervisory visit, are as follows:

- The pharmaceutical supply at the Kutime BP was very limited. The only medicines, which they had in stock, were chloroquine, glyceryl guaiacolate (GG), Ampicillin syrup and Quinine Antipirine Injections.
- A personal conflict has arisen between one of the POD cadres, Mr Pular Wanimbo and the mantri, Taibu. The problem would seem to be related to a disagreement over the cadres injecting patients. According to sources within the community, most people prefer to get injections and other medications through the BP cadres as they travel out to isolated communities. They are willing to inject people on a credit system whereby patients can pay when they have recovered and are able to gather money or tradeable goods again. The

formal health workers on the other hand require up front payment for services and do not often travel to the more remote communities. According to the cadres the Mantri Taibu had removed the records and reports from the BP and other staff could not check them or submit reports or requests for new pharmaceuticals.

### **2.2.3. Supervision at the POD level**

#### ***i. Bambuk POD (Desa Kupara/Parari)***

- There are two cadres registered as working at the Bambuk POD but, only one of these cadres, Diep Wanimbo, is active;
- The store of pharmaceuticals available in the Bambuk POD included chloroquine, GG, prednisone, cotrimoxazol, antacid and oralite.
- The daily disease register, monthly disease report book, monthly mortality report book and the pharmaceutical supply and usage report book were not available at the POD when the supervisory visit was made. Furthermore, the cadres were still unclear about the correct method for filling in reports and they had difficulty preparing stationary lists.
- From August 1999 through until February 2000 the cadres at Bambuk POD did not submit any records or reports to the Kanggime Puskesmas. The reason given for this failure to submit reports was that the POD Cadre at Bambuk, Diep Wanimbo, was absent from his post because he was taking part in the Cadre Exposure Trip to Java. Diep Wanimbo is registered with WATCH as both a POD Cadre and a Community Development Cadre. This arrangement normally works better and is more advantageous;
- According to the cadre one of the biggest problems he faced was the tendency of the local people to only bring sick people for medical treatment when the cases were very advanced. This means that many patients were beyond his help when they arrived at the POD even though they might have been saved had they come earlier. In order to overcome this problem the cadre has used the community announcement time at the end of weekly church services to convey appropriate health messages to the community;
- The POD must pay a quarterly reimbursement of Rp.10,000.00 to the Kanggime Puskesmas.

#### ***ii. Nabunage POD (Desa Nabunage)***

During February 2000 the house (honai) belonging to the POD cadre, Baibungen Tawolom, was deliberately burnt down in relation to a dispute over a woman. The cadre claims that most of his possessions were destroyed in this fire including :

- His and his families' personal effects and household goods;
- Pharmaceutical supplies;
- Equipment / materials provided by WATCH for the CD group;
- Livestock;
- Rp.600,000.00 in cash;
- The POD record keeping and reporting books and forms.

Due to this setback the Nabunage POD has been forced to close temporarily. According

to the cadre he intends to obtain new supplies of pharmaceuticals from the Puskesmas on the 25<sup>th</sup> of March so that the Nabunage POD can be reopened.

**iii. Wuluk POD (Desa Wuluk)**

- Two cadres, Birimus Gurik and Anas, were supervised during this visit to Wuluk POD;
- The store of pharmaceutical available in the Wuluk POD included chloroquine, GG, dexametason, cotrimoxazol, Vitamin C and B complex, metrinidasol, chloramphenicol, CTM, paracetamol, amoxicilin syrup, 2-4 cream and chloramfercort cream;
- The equipment available at the Wuluk POD included scales and minor surgical equipment
- The POD cadres prepare and submit monthly reports to the Kanggime Puskesmas based upon the POD daily census book. The Puskesmas staff are then responsible for using these reports to complete the LB1 reports;
- The cadres are already using the pharmaceutical usage forms, which have been promoted by WATCH.

**2.5 Programmer to revise and install completed Health Information System  
HIS Review Consultancy by Drs. Abdul Wahab, MPh., 23 February – 6 March 2000**

This consultancy confirmed many fears that the HIS has not been working well at either the recording phase or in the software. A comprehensive report from Dr Wahab details all the relevant issues. Activities which were undertaken during the HIS consultants visit to Jayawijaya District included the following :

- Identification of the problems related to those elements of the HIS computer program which have already been in operation;
- Field visits were made to the Puskesmas in Hom-Hom and the Puskesmas in Wamena to directly observe the implementation of the recording and reporting system at the sub-district level and the problems faced by Puskesmas workers in attempting to fulfil the requirements of the HIS;
- A meeting was convened with District Health Service Section Heads in order to facilitate the identification of constraints and problems with the HIS at the District level;
- A training workshop was conducted with the staff responsible for data recording and reporting (SP2TP) from 13 Puskesmas around the Baliem Valley. The purpose of this workshop was both to train these health workers in the new HIS procedures and also to uncover any problems with the HIS that have become apparent to these workers;
- Appropriate alterations and repairs were made to the HIS computer program;
- Data recording and reporting staff of the District Health Service Rehabilitation / Treatment Section (Seksi Pemulihan) were trained and assisted in how to use the HIS computer program properly.

### OUTPUT 3 - PREVENTATIVE HEALTH AND NUTRITION PROGRAM IMPLEMENTED

#### 3.1 DISTRIBUTION OF NUTRITION PLOT STARTER PACKS

Of the cadres who were sent on the first exposure trip to Java, the cadres from Kutime, Bambuk, Kanggime (Theo and Ekena) have already used the land around their house compounds to establish nutrition gardens. The crops which have been planted in these gardens include long beans, broad beans, Chinese cabbage, spring onions, tomatoes, ginger, manioc / tapioca and taro.

#### 3.2 PROMOTE THE USE OF SWEET POTATO FLOURS AND POWDERS

WATCH personnel have invested considerable effort into promoting the production, storage and use of sweet potato flours and super-oralite. However, the production and use of these products does not seem to have been adopted by community members. WATCH has found that CD group members, POD cadres, Posyandu cadres, TBAs and health workers have all failed to follow up on initial training in the production of sweet potato flour by either practicing its production or maintaining a supply of ready made flour. The factors, which have been identified as contributing to the communities' lack of interest in or lack of application of these products, include the following :

- Not all Community Development group members, cadres and health workers understand the process for preparing sweet potato flour, and especially super oralite;
- Some groups and individuals know how to prepare sweet potato flour and super oralite but do not practice it. The reason generally given is that they do not have adequate equipment (pots etc.) for its production;
- The time involved in preparing these products is considerable, especially for women who are already busy working in the gardens, raising children, etc.
- Local women find it easier to wean their children directly onto sweet potatoes rather than go through the effort of preparing sweet potato flour for this purpose;
- It is easier for POD cadres to use the oralite which they can obtain through the health service than go through the effort of manufacturing their own super oralite;
- Mothers also prefer to use packaged oralite as it is less effort than making super oralite;
- Possibly the community do not feel any real need for these products?
- It is possible that health workers do not wish to promote the use of such home remedies as this could undermine their positions of status, which are closely linked to control over pharmaceutical supplies, in the eyes of the community.

#### 3.3 DEVELOP IEC MATERIAL BASED ON PLA STUDIES

Preparation of the Health IEC materials has now been completed and the materials have already been printed. The amount of IEC materials produced is as follows :

• Flipchart	- <i>“Maternal &amp; Infant Health”</i>	:	200 copies
• Booklet	- <i>“Healthy Food”</i>	:	1500 copies
• Poster	- <i>“Washing Hands”</i>	:	100 copies
• Poster	- <i>“How to make Super Oralite”</i>	:	100 copies

- Poster - “*Posyandu*” : 100 copies

These materials have already been distributed to POD cadres, Midwives, Churches, the two Puskesmas and CD group members.

*i. Comments :*

When WATCH personnel visited Kanggime with the purpose of distributing and socially promoting the new IEC materials to women’s groups, church groups, midwives and cadres they met with an extremely positive response from the community. When people first saw the new materials they were shocked and pleased and made statements such as :

“*Wow, these pictures are of people we know, people from Kanggime!*” and  
 “*The words are our words, from the Lani Language!*”

When women and primary school children were shown the new IEC materials they were clearly pleased and happy with the new materials and laughed loudly whilst looking at the pictures and reading the Lani text. It is hoped that the IEC materials which have already been produced by WATCH can be used as effective health training / education media for the Lani communities of Kanggime and Kembu / Mamit Sub-districts. In particular it is hoped that the booklet on “Healthy Food” can be widely used in teaching local women about nutrition for themselves and their children. It is important for WATCH to conduct monitoring and evaluation of the use of these materials by the target communities in order to gauge the effectiveness and results of this media production and distribution campaign.

*ii. Further Plans :*

WATCH intends to print and distribute more of the existing IEC materials as well as producing a further booklet called “*Warning signs for husbands/fathers.*”

**3.4 TRAINING GIVEN IN FOOD PREPARATION**

The Training Officer conducted training in food preparation to women and other group members from the Desa Kutime, Bambuk, Nabunage, Wuluk and Kanggime (all in Kanggime Sub-district) during the month of March 2000. During these training sessions participants were trained in the following ideas and practices :

- The function of food as a source of energy, for building up the body and for regulating bodily processes. Examples of the different kinds of foods and their effects upon human health were also shown and discussed;
- The importance of a balanced daily diet was discussed and how local women could organise their planning and preparation of meals to ensure adequate intakes of proteins, carbohydrates, minerals, fat and vitamins;
- How to make a variety of healthy foods from local materials.

*i. Comments :*

- These types of training sessions are one of the strategies employed by WATCH to promote or socialise the importance of nutritious foods and how to plan and prepare a healthier diet. These training activities are felt to be quite an effective way of transferring new knowledge and practical skills as the participants can directly observe, interact and practice the new

skills;

- These types of training sessions will be more effective if a handbook covering the appropriate techniques of food preparation could be produced so that training participants can receive and take home an illustrated guide to the concepts and techniques taught during the training;
- It is important that the training on new food preparation techniques focus on locally available or producible materials such as peanuts for oil production and soybeans for soymilk. Training the target groups in food preparation techniques which require manufactured materials is deemed inappropriate as most people can rarely afford to purchase such foodstuffs;
- It is proposed that the types of daily menus which are taught during these training sessions be as simple as possible without overly compromising the balanced diet. Such simple menus will be easier to understand, practice and remember and are likely to be more appropriate for local women who do not have ample time for prepare more complex menus.

## COMPONENT II - GENDER AND DEVELOPMENT

### OUTPUT 4 - EXISTING COMMUNITY DEVELOPMENT INITIATIVE STRENGTHENED

#### 4.1.1 Training provided for groups with training materials such as agriculture, animal husbandry, appropriate technology and LEISA according to self-reliant stage

LEISA (*Low External Input Sustainable Agriculture*) training was conducted in both Kanggime and Kembu / Mamit Sub-districts. The training in Kanggime was facilitated by the male GAD Assistant and Training Officer whereas the training in Kembu / Mamit was facilitated by the Cadre Assistant and Cadre Supervisor. The training sessions were attended by 18 CD Group Organisers in Kanggime and 16 in Kembu / Mamit and held in the second and third weeks of January. For a full list names and details of the LEISA training participants in both sub-districts please refer to Annexe 2, Tables 2a and 2b.

#### *i. Training topics:*

The topics and materials covered during the LEISA training included the following :

- LEISA – Environmentally sustainable agriculture – Including how to construct terraced gardens and why terracing is important;
- Using land within housing compounds (silimo) to plant nutrition gardens;
- Revegetation and soil conservation;
- Chicken and rabbit raising for families;
- Planting techniques for recently introduced crops such as carrots, red kidney beans, soy beans and Chinese cabbage;
- Appropriate village technology (in Kanggime only).

The CD cadres and group members were also pre-tested in order to ascertain their knowledge and understanding of environmentally sustainable agriculture (LEISA). The results of these pretests are presented in the tables below (Table 1.1 to Table 1.5) along with accompanying notes and observations regarding these results.

**Table 1. Participants knowledge and understanding of the environment and natural resource conservation.**

SUB-DISTRICT	PRINCIPLES OF LEISA		EFFECTS OF DEFORESTATION		EROSION CONTROL METHODS	
	KNEW	DIDN'T KNOW	KNEW	DIDN'T KNOW	KNEW	DIDN'T KNOW
<b>Kanggime</b>	0%	100%	52.38%	47.62%	28.57%	71.43%
<b>Kembu</b>	54%	46%	25%	75%	50%	50%

**Table 2. Participants knowledge /and understanding of Organic Agriculture\**

SUB-DISTRICT	SOIL FERTILISATION		COMPOSTING		MULCHING		CROP ROTATION		INTER CROPPING		SHORTENING FALLOW PERIODS	
	KNEW	DIDN'T KNOW	KNEW	DIDN'T KNOW	KNEW	DIDN'T KNOW	KNEW	DIDN'T KNOW	KNEW	DIDN'T KNOW	KNEW	DIDN'T KNOW
Kanggine	9.5%	90.5%	14.3%	85.7%	4.8%	95.2%	9.5%	90.5%	14.3%	85.7%	4.8%	95.2%

**Notes :** Data concerning participants knowledge and understanding of organic agriculture from Kembu / Mamit Sub-district is not available.

**ii. Observations and comments :**

From the data in tables 1 and 2 a number of observations can be made :

- a. The majority of participants could not display an adequate knowledge of the principles of environmentally sustainable integrated agriculture (that the farmer, soil, crops, livestock and environment work together to build an integrated and sustainable system), soil conservation, and organic agricultural techniques;
- b. It should however, be remembered that the local agricultural systems are already organic systems and all of the training participants already practice a range of organic and integrated agricultural techniques. These include :
  - The use of extended fallow periods to allow for soil nutrients to be replenished;
  - Intercropping;
  - The application of potassium in the form of wood ash to new root crop garden beds (by slashing and burning the vegetation that has grown on the garden during the fallow period);
  - The use of pigs to till and fertilise the soil after harvest (which also serves to fatten the pigs);
  - Limited forms of terracing or physical erosion barriers; and
  - The planting of nitrogen fixing trees (*Casuarina* and *Albizzia falcataria*) around gardens.
- c. These techniques and local systems are not inherently flawed, indeed it is such indigenous agricultural which formed the basis of modern ideas about sustainable and organic agriculture. The problem with local agricultural systems has more to do with changing social, economic and environmental circumstances including : increasing population levels, increasing agricultural activity due to the advent of the cash economy, newly introduced crops and livestock which have different requirements and possibly the effects of climate change. The indigenous agricultural system therefore needs to be adapted, rather than replaced, to meet the new circumstances. It is therefore just as important to encourage local people to think about their own agricultural techniques and practices and conceptualise them as elements of an organic agricultural system as it is to introduce new practices and technologies;
- d. Although they already practice variations of many of these organic agricultural techniques on a regular basis they obviously have difficulty expressing their practical knowledge in a

verbal test situation. This inability to communicate practical knowledge could be due to factors such as poor language skills or nervousness in the face of project staff. However, it would seem more likely that most of the people tested cannot link their own practical knowledge, much of which may be so ingrained in habitual practice and lore that the underlying principles may be barely cognisable, to the new concepts being taught by WATCH.

- e. The participants of the training workshop in Kembu / Mamit scored considerably lower than on the section covering the effects of deforestation than did the participants in Kanggime. At first glance these results seem inconsistent as in the two other sections of the main test the participants from Kembu / Mamit scored considerably higher than those from Kanggime. Furthermore, these other two results follow the broad trend for testing results from Kembu / Mamit to be considerably higher than comparable results from Kanggime. This inconsistency can perhaps be explained by the fact that Kembu / Mamit Sub-district has a much lower population density and a much higher percentage of forest cover than Kanggime Sub-district. It would therefore seem likely that most communities in Kanggime have already felt the direct effects of deforestation on their day to day lives whereas most people from Kembu / Mamit have less concern for the potential depletion of seemingly endless forest resources.
- f. WATCH will continue to act to raise the communities' comprehension and application of knowledge in the area of sustainable agriculture and animal husbandry. It is hoped that this can be achieved through similar training activities as the one described above, however, the project must continue to adapt training materials so that they are more accessible and comprehensible to training participants.
- g. Project personnel must also continue to seek ways to develop ways to improve community members' understanding and conceptualisation of their own agricultural systems. This is necessary so that they can relate the existing systems to the new systems being taught, identify problems or opportunities with their own systems and seek ways to overcome problems or capitalise on opportunities through the integration and adaptation of old and new systems.

*Table 3. Utilisation of land around the housing compound (Silimo) for nutrition gardens*

SUB-DISTRICT	UNDERSTANDING OF THE CONCEPT OF NUTRITION GARDENS*		UNDERSTANDING OF THE PURPOSE & BENEFITS OF THE NUTRITION GARDEN		CD GROUP HAS ESTABLISHED A DEMPLOT NUTRITION GARDEN**	
	KNEW	DIDN'T KNOW	KNEW	DIDN'T KNOW	YES	NO
<b>Kanggime</b>	23.8%	76.19%	42.86%	57.14%	9.52%	90.48%
<b>Kembu / Mamit</b>	31%	69%	12%	88%	25%	75%

*iii. Notes:*

- \* The term *Nutrition Garden* refers to gardens planted in the space around a Lani housing compound (Silimo). These nutrition gardens should be planted with a variety of vegetables, fruits, nuts, legumes, spices and medicinal plants and should be consumed regularly by group members to help maintain good nutrition amongst the family. The concept of nutrition gardens was developed by WATCH as a way to encourage the community to develop the existing gardens immediately around their housing compounds (silimo) by planting a wider variety of nutritious and medicinal crops and to encourage the consumption of these nutritious foodstuffs by the compound's inhabitants.
- \*\* The term *Demplot Nutrition Garden* refers to communal demonstration plot nutrition gardens which CD groups in Kanggime and Kembu-Mamit have been requested and encouraged to establish. The purpose of these demplot nutrition gardens is to provide a living example of the value of nutrition gardens and also as a source of plant propagules (seeds, cuttings, etc.) for the establishment of further nutrition gardens throughout the area.

**iv. Observations and comments:**

- More training participants from Kembu / Mamit were able to display an understanding of what constitutes a nutrition garden and they were also much more likely to have applied their knowledge about nutrition gardens by establishing a demplot nutrition garden. However, their ability to display an understanding of the purpose or benefits of nutrition gardens was considerably lower than that of participants from Kanggime. This suggests that, whilst people from Kembu / Mamit are more receptive to many of the new ideas, practices and technologies being conveyed by WATCH, their actual ability to understand the underlying reasons or purpose of such ideas, techniques and technologies is still poor. Given their higher degree of isolation, harsher environmental conditions and their more limited experience with development projects, it is not surprising that people from Kembu / Mamit should display a high degree of receptiveness to innovation and a low degree of understanding of the underlying ideas and reasons for those innovations.
- According to the results of the mid-term survey in February 2000, 87.9% of CD group members and 68.4% of non-CD group members claimed to be using the space around their housing compounds for nutrition gardens. By comparison the results of this test showed that only 9.52% of training participants from Kanggime and 25% from Kembu/Mamit had established a communal demplot nutrition garden. This result shows that WATCH's strategy for socialising the concept of nutrition gardens through the establishment of demplot nutrition gardens by local CD groups is still falling well below the target figures.
- Community members seem to prefer to establish nutrition gardens on a family rather than a group basis because this means that the nutrition garden can be located closer to their own family and that there are less likely to be disputes over the division of labour inputs and produce outputs.

- It is therefore highly likely that WATCH's nutrition garden activities would have greater impact if they were focused on encouraging individual families or groups of compound cohabitants to establish their own nutrition gardens rather than focusing on the establishment of demplot nutrition gardens by entire CD groups.

**Table 4. Participants knowledge/understanding of chicken raising techniques and practices**

SUB-DISTRICT	WHY CHICKENS SHOULD BE KEPT IN PENS		HOW TO CONSTRUCT CHICKEN PENS / COOPS		CHICKEN RAISING PRACTICES & TECHNIQUES	
	KNEW	DIDN'T KNOW	KNEW	DIDN'T KNOW	KNEW	DIDN'T KNOW
Kanggime	38.99%	61.91%	47.62%	52.38%	23.81%	76.19%
Kembu/Mamit	54%	46%	25%	75%	34%	66%

**Table 5 Participants knowledge/understanding of chicken raising techniques and practices**

SUB-DISTRICT	WHY RABBITS SHOULD BE KEPT IN CAGES		HOW TO CONSTRUCT RABBIT CAGES		AGE AT WHICH RABBITS CAN BE MATED / BRED		PREPARING RABBITS FOR BREEDING	
	KNEW	DIDN'T KNOW	KNEW	DIDN'T KNOW	KNEW	DIDN'T KNOW	KNEW	DIDN'T KNOW
Kanggime	33.3%	66.67%	23.81%	76.19%	0%	100%	0%	100%
Kembu/Mamit	57%	43%	25%	75%	0%	100%	44%	56%

**v. Conclusions :**

- The majority of training participants in both Kanggime were unable to display an adequate knowledge or understanding of rabbit and chicken raising, and in particular their knowledge of how and why to pen these animals.
- More training participants from Kembu / Mamit were able to display an adequate knowledge of rabbit and chicken raising than was the case in Kanggime. The results from Kembu / Mamit are slightly to considerably higher than comparable results from Kanggime in five of the seven areas tested. Of the remaining two areas tested nobody from either sub-district was able to display an adequate knowledge regarding the minimum breeding age of rabbits whereas the number of people in Kembu / Mamit who knew how to build chicken coops was considerably (over 22%) lower than was the case in Kanggime.
- The fact that the overall results of testing in Kembu / Mamit were better than comparable results from Kanggime follows the general trend which has been observed throughout the WATCH Kanggime extension. It is believed that most people from Kembu / Mamit display a higher degree of receptiveness to new ideas, practices, techniques and technologies due to the following factors:
  - a. Environmental conditions in Kembu – Mamit are generally harsher. The soils are generally poorer, the incidence of malaria and other diseases is much higher, etc.

- b. People in Kembu / Mamit experience a higher degree of geographic isolation; and
- c. People in Kembu / Mamit have had very limited contact with government or non-government

development activities and have had very few economic opportunities.

Although these types of factors might lead to a higher degree of receptiveness to innovation it does not mean that people from Kembu / Mamit have an equally high ability to understand the ideas and reasons underlying new innovations.

- The fact that nobody from either sub-district was able to display an adequate knowledge regarding the minimum breeding age of rabbits is presumably related to the extremely poor numeracy skills and limited conception of annual cycles of most training participants. Such problems are common throughout much of Jayawijaya District due to the almost aseasonal climate and the limited numerical systems of most cultural groups. As it is not within the projects scope to invest considerable amounts of time in teaching numeracy skills WATCH must seriously consider alternative criteria for determining whether or not a rabbit is ready to breed. For example the relative size of the rabbit or the occurrence of physiological changes could be used.
- The fact that the results of the section on how to build chicken coops from Kembu / Mamit were worse than the comparable results from Kanggime cannot be adequately explained at this time. One possible explanation is that the lower population density in Kembu / Mamit means that it is easier to raise chickens on a free-range basis without fear of theft. Therefore, people from Kembu / Mamit might be less inclined to have a strong interest in going to the extra effort of building chicken coops than is the case in the more densely populated Kanggime Sub-district. This would not apply to rabbit raising as it is not really feasible to raise rabbits outside of cages.
- Direct observations by WATCH personnel during supervision visits have shown that few people from either sub-district have taken up rabbit raising. This limited interest in rabbit raising must contribute to the poor knowledge of rabbit raising amongst the participants tested.

WATCH intends to continue implementing activities aimed at raising the communities' knowledge and skills in regards to sustainable agriculture and animal husbandry. These activities will include the establishment of demonstration and seed gardens, distribution of new planting materials, further training activities and ongoing supervision and technical supports.

#### **4.1.1.a      Appropriate Technology Training**

During February – March 2000 appropriate technology training was conducted at six locations in Kanggime Sub-district. These training sessions were facilitated by the WATCH Training Officer and, in accordance with requests made by the local community, each of the appropriate technology training sessions attempted to target the members of three churches. People attending these training sessions included CD cadres, POD and Posyandu cadres, other CD group members and any other community members who wished to attend. The locations, church groups targeted and number of participants of each of these training sessions are listed

below in Table 6.

**Table 6. Locations and participants of Appropriate Technology Training Activities in Kanggime during February – March 2000**

LOCATION	CHURCH GROUPS ATTENDING THE TRAINING	NUMBER OF PARTICIPANTS
Kanggime Airfield	1. Listrik – Yames & Theo	19 people
Yitelo	1. Yitelo 2. Dimbogu	19 people
Belep	1. Belep 2. Ligimbak 3. Kanggineri	11 people
Nunggawi	1. Nunggawi 2. Abera 3. Kubu	15 people
Wondame	1. Wondame 2. Pagona 3. Jambilia	18 people
Loakbanom	1. Loakbanom 2. Ewan 3. Andomak	25 people
<b>TOTAL</b>	<b>15 Churches</b>	<b>133 people</b>

Due to the fact that these training sessions were carried out in remote mountainous areas, on average the Training Officer had to travel on foot for roughly one half to a full day to and from each location (except Kanggime Airstrip) and overnight at the training locations. This meant that to complete the six training sessions a total of 13 days (seven days travelling and six days facilitating training) was required.

Although the time expenditure for WATCH personnel involved in carrying out training directly in remote locations (as opposed to requesting participants travel to centralised locations such as Kanggime) is quite considerable, this system for conducting grass roots training is deemed appropriate and advantageous for a number of reasons including the following :

- More people are likely to become involved in the training if it is located at a more centralised location because it is much less effort and disruption to the lives of local people. Past experience from conducting training activities in central locations such as Kanggime town has been that it is difficult just to get the cadres to attend let alone other group members and the broader community.
- The training is local specific ie. the facilitator and participants can directly observe and utilise locally available materials and equipment;
- The training visit also serves as an additional opportunity to conduct supervision of community development groups and directly observe the social, environmental, economic and health conditions being experienced by remote communities.

*i. Topics Covered :*

Topics covered in this training included the following :

- The importance of a range of nutritional foods for health and development;
- The range of foods which should be included in a nutritious diet;
- Practical training in how prepare a range of nutritious foodstuffs from local materials such as sweet potato, yams, taro, tapioca, soybeans, peanuts, bananas, etc.

*ii. Reactions of training participants and local leaders:*

The reactions of participants and local church leaders were generally very positive. However, at the completion of the training some participants urged or requested WATCH to provide them with assistance in the form of pots etc. ostensibly so they could practice their new knowledge / skills. Some examples of the types of comments made about the training sessions by participants are translated below :

*“ ..... We are pleased that WATCH staff will come to our village to give us training because, in the past there has never been anyone who has wanted to travel across these mountains to give us training like this ..... “*

Training Participant

*“ .....In order to raise the nutrition of our families we actually have plenty of raw materials here but previously we did not know how to process or use them. Now we are beginning to see.....”*

Local Church Leader

*“ .....We have learned how to process various kinds of garden produce and we try to practice these techniques but the problem which we face is that we do not have the proper equipment. I therefore propose that WATCH should help us by providing us with appropriate equipment such as cooking pots, hand presses and hand mills.....”*

Training Participant

*iii. Comments and observations :*

WATCH has adopted the policy that assistance to target communities should primarily be in the form of the dissemination of new knowledge and skills, supervision, facilitation and technical assistance. Direct material assistance should be minimised and where applied it should be strategic, ie. pre-planned with clear and justifiable objectives, which should also be easily clarifiable to members of target groups. WATCH has applied several basic criteria as to what types of material interventions / assistance are acceptable within the scope of the project. According to these criteria project interventions in the form of material assistance should be :

- Focused on the alleviation of key problems, which are considered to seriously constrain community development in the short term. (This category includes medical equipment and supplies, report forms for the HIS); and/or
- Act as immediate stimulants to encourage community development activity. (This category primarily includes the distribution of agricultural tools in the Self Reliance Packages); and/or

- Be able to be developed and disseminated by the community well after the completion of project interventions. (This category includes seeds and other planting materials and IEC training materials); and
- Unlikely to be appropriated for purposes which diverge considerably from the intended application.

Although the types of equipment requested by cadres after the recent workshops could be considered to be acceptable under the second criterion, WATCH is unwilling to provide individuals or groups with equipment such as cooking pots, hand mills, etc. because these are highly likely to be appropriated for other household uses or possibly resold to other community members. WATCH considers these types of equipment to be household goods the purchase of which should be the responsibility of individual families. It is felt that the distribution of such equipment would be counterproductive to the goals of the project as it would undermine group self-reliance and foster a handout mentality.

#### **iv. Issues :**

The experience with community development groups in Kanggime Sub-district over the past few years suggests that community perceptions towards the project have gradually changed. In 1998 community groups in Kanggime were very pro-active even to the extent of sending cash to the project office in Wamena so that WATCH could purchase equipment such as cooking pots, hand presses, hand mills, graters etc. At the completion of the most recent appropriate technology training activities in Kanggime the community perception that quickly surfaced in all groups was that, having trained them in these new techniques, WATCH should be responsible for providing the equipment required to carry out such food processing activities. WATCH personnel believe that community perceptions towards the project are shifting away from WATCH being there to facilitate and support the communities own initiatives towards a vision of WATCH as a rich cargo provider.

This perceived trend has also been observed in various other areas of the project. In fact the results of most tests and the observations of project staff from supervisory visits suggest that community interest and involvement in the project overall has waned considerably since 1998. In neighbouring Kembu / Mamit sub-district on the other hand, where project interventions were only commenced in 1999, the results of tests and observations suggest that community members are presently quite keenly interested in the project and community development groups are generally quite pro-active.

This issue is of paramount concern for WATCH if it is to achieve its goal of establishing a sustainable PHC model for the highlands of Jayawijaya. If community interest in the development activities cannot be sustained for more than a few years or if community perceptions of development programs such as WATCH are grounded in patron-client relationships or perceptions of the project as a bringer of cargo, then the sustainability of outcomes will be considerably compromised.

The reasons for this shift in community perceptions are as yet unclear. WATCH therefore needs to conduct further in depth investigation in this area. In particular, a number of questions

which need to be examined include the following :

- What social, environmental, economic or other factors have driven or contributed to these changes?
- Have similar shifts in perceptions been observable amongst other community development groups after continued exposure to involvement with WATCH or similar development activities (ie World Vision Area Development Programs in Jayawijaya)?
- Are such shifts in perception likely to recur amongst other cultural groups in Jayawijaya given a similar community development approach and timeframe or can this response be considered to be a local, culturally or even historically specific phenomena?
- To what extent has the past conduct or interventions of WATCH impacted on or caused this shift in community perceptions?
- To what extent have other WATCH interventions involving the distribution of other equipment and materials, such as the distribution of Self Reliance and Nutritional Starter Package (see section 4.1.2 of this report for further details) and medical equipment and supplies, contributed to this shift in perceptions?
- If the distribution of “strategic” material assistance is impacting upon community perceptions and attitudes towards other project interventions and the project as a whole, how can the project model be modified to allow for the distribution of strategic material assistance whilst safeguarding against the development of community attitudes which are incompatible with or antithetic to the goal of community self reliance?

**v. Achievement of appropriate technology training targets:**

As one of the indicators of success for the WATCH appropriate technology interventions, target numbers of groups who should receive training in appropriate technology by the end of the project were established. Table 7 shows the progress in this area from the start of the WATCH Kanggime Extension Phase in November 1998 up until the present.

*Table 7 Total number of groups who have received appropriate technology training up until March 2000*

SUB-DISTRICT	TARGET	NOV. 98 TO MAY 99	JUNE 1999	JULY 1999	JAN-FEB 2000	MARCH 2000	TOTAL	PERCENTAGE OF TARGET ACHIEVED
Kanggime	46 Groups	11	9	0	15	11	46	100%
Kembu / Mamit	50 Groups	7	0	12	0	0	19	38%

From the above table it can be seen that the target number of groups in Kanggime Sub-district to receive training in appropriate food processing technology has already been achieved whereas only 38% of the target number of groups in Kembu / Mamit have been trained. The lower number of groups trained in Kembu / Mamit has been caused by a number of factors including the following :

- The terrain in Kembu / Mamit sub-district is considerably more rugged;
- The distance between villages in Kembu / Mamit is generally much greater than in Kanggime. This not only makes it considerably harder and more time consuming for the

- training facilitator to reach the training location but it also makes it harder to combine a number of groups in one training session, as has been done in Kanggime;
- The number of participants attending appropriate food processing technology training activities in Kanggime has been consistently higher than in Kembu / Mamit. Whether this is entirely due to the more dispersed nature of settlement patterns in Kembu / Mamit or a greater interest amongst the Kanggime community is unclear.

Given that 17 months of the two year Kanggime Extension have already passed and only a further five months of project interventions are currently planned, considerable effort will be required to ensure that a further 31 groups in Kembu / Mamit receive training in appropriate technology.

#### **4.1.1.b Promotion of sweet potato flour and appropriate food processing technology**

At the present time it can be observed that a wide range of groups and organisations (including NGOs, women's groups and church groups) have become involved in the promotion of sweet potato flour products and other locally manufacturable food stuffs. Activities conducted by these groups include training activities, competitions and socialisation activities. This level of interest in sweet potato products and other appropriate food processing technology did not exist in the early to mid 1990s when WATCH first began the promotion of these activities. The fact that a wide range of NGOs, community groups and semi-government organisations have recently become interested in the promotion of sweet potato flour products and other appropriate food processing technology is a clear indicator of the success of WATCH's interventions in this area. It also means that these types of activities will continue to be implemented after the completion of the WATCH project.

##### **i. WATCH involvement in the appropriate food processing technology training workshop conducted by BINA SWADAYA in Wamena 11 March 2000.**

On the 11<sup>th</sup> of March 2000 the Bina Swadaya Foundation conducted a one-day training workshop on appropriate technology for food processing in Wamena. The target group for this training workshop was the indigenous people who are operating or attempting to establish small businesses selling cakes and other cooked or processed foods. These groups are the main targets of the Bina Swadaya Foundation's development activities in Jayawijaya.

The main topics covered in this training workshop were how to make a variety of cakes from sweet potatoes. The purpose was to both raise local nutrition levels through dietary diversification and to create economic opportunities for local people using raw materials which they can produce themselves. 26 people including 24 women and 2 men attended the training. The workshop facilitator was Ms. Kuti Wenda, who is a WATCH appropriate food processing technology cadre. She was also assisted by the GAD Coordinator.

Two representatives of the Potato Processing Project (Proyek Pengolahan Ubi) also attended the workshop. This is a joint initiative of the Bogor Agricultural Institute (IPB) and the National Planning Body (BAPPENAS) which arose as a response to the 1997 famine. The main aims of this project are to increase the communities' food security and safeguard the sweet potato gene pool of Jayawijaya. This project is also interested in establishing a sweet potato flour-processing factory in Jayawijaya. However, to date they have experienced difficulties

when trying to promote this idea to the local community. They were therefore most interested in the appropriate food processing technology training workshop as it introduced the concept of using sweet potato flours to prepare a variety of cakes and other food stuffs and thus further socialised the production and use of sweet potato flour. After the training workshop the Potato Processing Project requested that WATCH work closely with them in developing new sweet potato flour products.

#### *ii. Appropriate food processing technology handbook*

WATCH in cooperation with KOMPAS (with funding from the Natural Disasters Trust Fund), has prepared a simple handbook on “*Appropriate Technology for Processing and Preserving Sweet Potatoes.*” This handbook includes both information on how to process and preserve sweet potatoes as well as a number of recipes that can be prepared using dried sweet potatoes or sweet potato flours. The book has been prepared in four local languages including :

1. Lani / Western Dani – Covering approximately 160,000 people in Western Jayawijaya and neighbouring Puncak Jaya District;
2. Dani / Grand Valley Dani – Covering approximately 80,000 – 100,000 people around Wamena and the Grand Baliem Valley;
3. Yali – Covering approximately 30,000 people in Kurima Sub-district east of Wamena; and
4. Kimyal – Covering approximately 8,000 people around Koropun and Sela in Kurima Sub-district.

WATCH and KOMPAS intend to produce a further translation of this handbook in Mee or Ekagi which would cover an estimated 100,000 people from the Paniai District. These publications therefore have a theoretical target group of almost 400,000 people in the highlands of Papua Province. It should however be remembered that these languages often display a high degree of dialectical variation. For example, linguists generally consider both Dani and Yali to incorporate three dialects each whilst Kimyal is recognised as having two dialects. Lani on the other hand, has not been formally divided into separate dialects by linguists but it still displays a high degree of variation across its vast and rugged range. Furthermore, most of the people in this group have extremely poor literacy skills in both Indonesian and their local language, which had no written form until very recently when missionaries began producing local language Bibles. These factors will undoubtedly impact upon the geographic ranges across which these books will be intelligible, the amount of penetration which these publications will be able to achieve into these communities and the ability of community members to read and understand this booklet.

The first four translations of this handbook have already been printed and will shortly be distributed to the appropriate target communities

#### **4.1.2 Support provided for CD groups according to self-reliance stage**

At the completion of the LEISA training, project staff (GAD Assistant, Training Officer,

Cadre Supervisor and Cadre Assistant) distributed self-reliance packages (comprising agricultural tools) and nutrition starter packs (comprising planting materials for the Demplot Nutrition Garden). The number of CD groups which received Self Reliance and Nutritional Starter Packages during February 2000 are listed below in Table 8 whereas data on the total number of packages which have been distributed during the WATCH Kanggime Extension Phase is displayed in Table 9.

**Table 8. Number of CD groups who received Self-Reliance and Nutritional Starter Packages during February 2000**

SUB-DISTRICT	NUMBER OF CD GROUPS WHO RECEIVED SELF RELIANCE PACKAGES	NUMBER OF CD GROUPS WHO RECEIVED NUTRITIONAL STARTER PACKS
Kanggime	20 Groups	20 Groups
Kembu / Mamit	16 Groups	16 Groups
<b>Total</b>	36 Groups	36 Groups

**Table 9. Number of CD Groups who have received Self Reliance and Nutritional Starter Packages during the WATCH Kanggime Extension 1999 – 2000**

SUB-DISTRICT	TARGET NUMBER OF GROUPS TO RECEIVE PACKAGES	APRIL MAY 1999	JUNE 1999	JULY 1999	JANUARY FEBRUARY 2000	TOTAL	PERCENTAGE OF TARGET ACHIEVED
Kanggime	46	11	15	0	20	46	100%
Kembu / Mamit	50	14	0	13	21	48	96%

From the data in Table 9 it can be seen that WATCH has basically already fulfilled its targets for the distribution of Self Reliance and Nutritional Starter Packages to Community Development Groups in Kanggime and Kembu / Mamit. Only 4% (or 2 groups) of the targeted 50 groups in Kembu / Mamit are yet to receive packages.

#### **4.3 SUPERVISION OF CD GROUPS BY STAFF AND CADRES.**

Supervision of the activities of community development groups was conducted in both Kanggime and Kembu / Mamit during this period. Supervisory activities in Kanggime Sub-district were conducted by the GAD Assistant and Training Officer whereas, supervisory activities in Kembu / Mamit were conducted by the Cadre Supervisor and Cadre Assistant. The purpose of these supervisory visits was :

- To directly observe the progress of community development groups;
- To meet with group organisers and members as well as other community and church leaders in order to discuss the progress of the groups and problems which they were experiencing; and
- To provide locally specific advice, technical assistance and encouragement to the organisers and members of the community development groups.

A total of 34 community development groups, 17 in Kanggime and 17 in Kembu / Mamit, were visited during February – March 2000. Details of the community development groups who were visited and comments and observations on the progress of these different groups are contained in Annexe 2, Table 1. A summary of findings is presented below:

***Kanggime :***

- Five (5) groups were evaluated as having achieved satisfactory progress. This included two (2) groups whose progress was considered very good and one (1) whose progress was excellent;
- 5 groups had progressed but not sufficiently;
- 6 groups had failed to implement any activities; and
- Information could not be obtained regarding the remaining one group.

***Kembu-Mamit :***

- Five (5) groups were progressing satisfactorily;
- Ten (10) groups were only just starting to be active; and
- Two (2) groups were not active or progressing.

**4.5. INCREASE GENDER AWARENESS AT DISTRICT LEVEL**

***i. Establishment of womens foundation***

During this period WATCH has been working closely with the *Yayasan Humi Inane* or Women's Voice Foundation with the aim of developing the capacity of this new indigenous NGO to actively represent and advocate the rights and needs of indigenous women in Jayawijaya. This foundation was originally conceived over two years ago during a district level gender workshop, which was facilitated by WATCH. This idea was taken up by a group of Papuan women who had already been active in the areas of women's rights and well being. They approached WATCH to express their interest in working together in order to establish an umbrella organisation for non-government women's groups in Jayawijaya. Since that time they have been working closely with WATCH in order to establish this foundation. Recently this foundation was legally recognised by the GOI and the foundation's constitution was officially registered with the appropriate government departments. Details on the mission, programs and directors of the yayasan are given at Annexe 3.

***ii. WATCH's involvement in capacity building with Yayasan Humi Inane :***

WATCH personnel have continued to work with Yayasan Humi Inane personnel over the past two years and has implemented a range of capacity building initiatives or activities to help establish this new foundation. These capacity building activities have included the following :

- Assisted with clarifying and focusing the foundation's vision and mission statements;
- Kept them informed of women's health issues, training opportunities, workshops, etc.
- Helped them with the development of contact networks within the government, NGO and donor communities;
- Provided basic training in administrative, accounting and management skills for running an

NGO;

- Provided recommendations to other organisations wishing to work together with Yayasan Humi Inane;
- Assisted with the preparation of plans and proposals.

#### **4.7 & 4.8 EXPOSURE AND SKILLS TRAINING TRIP TO EAST JAVA**

During February and March 2000 final preparations were made for the departure of a second group of cadres and CD group members to take part in an exposure trip and skills training at the Living Environment Education Centre (PPLH) in Seloliman, Mojekerto, East Java. The target number of participants for the second group was 22 people from Kanggime and Kembu / Mamit Sub-districts. The first exposure trip and skills training trip to East Java had been of one month's duration. The second trip was shortened to a total of 20 days because experience from the first exposure trip suggested that after about 20 days the participants had become bored and unreceptive to the training. A full list of participants and replacements is given at Annexe 4.

*Table 10. Summary of the target number and the realised number of participants in the second exposure and skills training trip to East Java.*

	TARGET	MALE	FEMALE	REALISATION	MALE	FEMALE
<b>Kanggime</b>	11	9	2	10	7	3
<b>Kembu</b>	11	10	1	8	8	0
<b>Total</b>	22	19	3	18	15	3

##### *i. Selection and preparation of participants:*

The process by which cadres were selected to take part in the exposure trip was as follows

:

- a. A criterion for determining which cadres would be most likely to be able to understand and thus fully benefit from the training was established by WATCH personnel. This criterion included:
  - The cadres CD group should have achieved and be able to demonstrate an appropriate level of activity and progress;
  - The cadre should have achieved good results in Pre-testing prior to the LEISA training;
  - The cadre sent as the representative of a local church so that upon the cadres return they will be well placed within the community to continue to encourage group development;
  - The cadre should have displayed a strong commitment to community development and the dissemination of new knowledge and skills.
- b. All WATCH personnel met together in order to decide upon which cadres would be selected to participate in the exposure trip and skills training in accordance with the criteria outlined above.
- c. WATCH personnel met with community and church leaders and local government personnel to further discuss the selection of participants.

- d. Letters of invitation were sent out to all of the selected cadres in Kanggime and Kembu / Mamit Sub-districts. At this time letters were also dispatched to other sub-district and district level church and government leaders informing them of the selection of participants.
- e. During their visit to Kanggime the Health Coordinator and Training Officer helped to prepare the selected cadres for their departure to East Java.
- f. The proposed participants were then relocated to Wamena for a period of one week where they received further pre-departure training and briefing as well as other preparations before setting off to East Java.

*ii. Problems which occurred in Kanggime during preparations for the second exposure and training trip:*

- a. When the Health Coordinator and Training Officer met with cadres in Kanggime it transpired that of the 11 cadres who had been selected to participate in the trip 7 were no longer willing to participate. The reasons presented for wishing to withdraw from the trip included : Personal illness, travel sickness, illness of offspring and because the training was considered not to be very useful as the project was about to end.
- b. When WATCH personnel enquired more deeply as to the underlying reasons why so many cadres were dropping out of the exposure and training trip at such a late stage a number of other issues came to light including the following:
  - The cadres hoped that the exposure trip could be cancelled and the funding for this activity could be redirected to the proposed participants to use as capital to fund community development group or POD activities.
  - The community felt that it would be much better if WATCH built a training centre like PPLH in Kanggime so that a larger proportion of the community could have access to this kind of training.
  - The proposed participants expressed their feeling that exposure and training trips should go to destinations within Papua Province rather than to Java. This desire would seem to have arisen only in the last few months. Previously cadres have been very enthusiastic about travelling to Java for such exposure and training trips. It is therefore suspected that due to recent political developments and the current climate of uncertainty in Papua Province cadres may fear to leave the province for a range of possible reasons.
  - A number of cadres expressed the opinion that there was not really much point or benefit in going to Java when the project was about to finish anyway.
  - Some individuals within the community appear to have been jealous or annoyed that their wives were not selected to take part in the trip and had subsequently actively tried to discourage other cadres from participating.
  - A number of cadres who had participated in the first exposure and training trip seem to have been of the impression that after the trip they would receive an amount of cash from the project to use as starting capital for group activities. When they did not receive the money which they expected some of these cadres set about actively or sub-participating in the second trip.consciously discouraging other cadres from participating in the second trip.

***iii. Resolution of problems with cadres dropping out of the exposure & training trip :***

Based on the reports received from staff in the field WATCH staff held a meeting to discuss the situation and seek alternative strategies to overcome this problem. In this meeting it was decided that other alternative participants should be offered the places of those cadres who had refused to travel to Java. The alternative participants could either be members of the same community development groups as those people who had rejected the opportunity or they could be from different groups. It was subsequently found that there were still many other people from throughout the community of Kanggime who were very keen to take part in the exposure trip.

Unfortunately, this problem was not entirely resolved through the selection of new participants to replace those who had refused to take part. In fact, the cadres who had originally refused to take part in the trip were angry when their places were taken by others as they wished to see the funding for this activity distributed directly to the originally proposed participants as group starting capital. Ultimately some of these cadres blocked the runway when the plane was due to fly in to collect the trip participants. As a result the 8 male participants were forced to walk for two days to reach Wamena and only the 2 female cadres were able to travel to Wamena by plane.

WATCH decided to continue with the implementation of this activity on the basis that information received from the community suggests that there are still many people in the community who wish to take part in activities of this nature. The fact that 8 cadres from Kanggime would walk for two days and face the anger of those cadres whom they had replaced in order to participate in this exposure and training trip (even when it was clearly apparent that there would be no cash or other handouts associated with it) attests the strong community interest in activities of this nature.

***iv. Tentative conclusions :***

It seems apparent that this problem doesn't represent the opinions or attitudes of the entire community towards the exposure and training trip activities. It is believed that only a few individuals were directly involved and that they were probably provoked by others for reasons which are not yet entirely clear.

***v. Problems in Kembu / Mamit :***

WATCH personnel received information that seven of the eleven cadres from Kembu / Mamit Sub-district had also refused to travel to East Java to take part in the exposure and training trip. However, four other cadres were found who were willing to take up some of these places. Of the eight cadres who ultimately joined the trip five travelled to Wamena by light aircraft and three walked. Once they arrived in Wamena the cadres from Kembu / Mamit informed WATCH personnel that problems which had arisen in Kembu / Mamit were similar to the problems experienced directly in Kanggime. However, in Kembu / Mamit the problems were identified and overcome more easily as Mr. Timotius Wakur, a local church leader and member of the District Parliament, became personally involved in resolving the conflict. Mr.

Wakur continues to support the exposure and training trip program on the grounds that it is a rare opportunity for people from Papua to take greater control in the processes of development and social change.

- a. The total number of cadres who ultimately joined the group travelling to East Java for the exposure and training trip was 18 including 10 people from Kanggime and 8 people from Kembu / Mamit
- b. The three empty places which could not be filled by participants from Kembu / Mamit at such short notice were filled by 3 cadres from the World Vision Area Development Project at Pantai Kasuari on the southeast (Asmat) coast of Papua.
- c. After a four-day pre-departure briefing and induction period in Wamena a total of 21 participants (including 3 from Pantai Kasuari) accompanied by the WATCH nutritionist, Nini Deritana and Cadre Assistant, Agustinus Tekege, departed from Wamena on the 24<sup>th</sup> of March. The group is expected to return to Wamena on or around the 27<sup>th</sup> of April 2000.
- d. In order to avoid further cases of cadres making unreasonable demands upon the project, WATCH has made clear agreements with the cadres departing to Java regarding the rights and obligations of all parties.

*vi. Analysis of the problems arising in relation to the exposure and training trip:*

- The experiences described above indicate that there has been a considerable change in the situation in Kanggime and Kembu / Mamit. Only six months ago when promoting the first cadre exposure and training trip to Java, WATCH found that most cadres were extremely enthusiastic about this opportunity and those who could not participate in the first trip expressed a clear desire to join the second trip. Now many of the cadres selected have refused to take part and have attempted to pressure WATCH to give them cash payments instead, even though there were still many other cadres who wish to participate.
- It seems highly likely that the high drop out rate and other problems related to the second exposure and training trip are related to the growing political uncertainty in Papua Province. In particular cadres may fear that something might happen on the 1<sup>st</sup> of May, the date set by independence activists for some form of demonstration, and after this date they might not be able to re-enter Papua.
- It seems to be the case that community perceptions of the project have shifted away from embracing the concepts of self-reliance and sustainability towards viewing the project as a source of cash and immediate material gratification. This is a key issue for WATCH, which has been discussed in greater detail in section 4.1.7 of this report and requires further research in the future.
- There are a number of individuals in positions as cadres with WATCH CD groups who would seem to be primarily motivated by thoughts of personal profit rather than being concerned for the groups well being and development.

## COMPONENT III - MANAGEMENT

### OUTPUT 5 - MANAGEMENT SYSTEM IMPLEMENTED

#### 5.1 ANNUAL (MID-TERM) SURVEY

##### *i. Survey Methodology*

The mid term survey was conducted in January and February. Details about the survey methodology are in Annexe 5.

##### *ii. Lessons learned*

- There was a clash between the timing of the pre-survey training activities and logistical preparations for departure to the field. This resulted in delays in the survey team's departure, which reduced the effectiveness of the training. The selection and use of SPK students to carry out the surveys as part of their required field work practical is an excellent strategy which enables a much better survey sample than would otherwise be possible.
- The dependency of the survey team on light aircraft flight schedules is very high. Frequent changes in these schedules lead to several postponements of the data gathering activities, which meant that the time required for the survey exceeded the target.
- The number of indicators, which the survey was meant to measure, was too great due to the wide variety of project activities, which the survey was meant to cover (Health and Community Development).
- The lack of data on population in each cluster and the wide distribution of settlements made it difficult to carry out a proper cluster sampling exercise. Because of these constraints respondents had to be selected by lottery and samples tended to be drawn from limited areas within each cluster.
- Several variables such as immunisation and vitamin A, immunisation TT and ANC could not be analysed from information in child health record cards.
- Considering the difficulty of the terrain and the high cost of travelling to the field the survey trip was also used as an opportunity to implement a variety of other activities including the distribution of vitamin A and Iron tablets, training of CD cadres and a variety of medical consultations.

##### *iii. Survey Results:*

The survey results and findings on the Health Section and Community Development can be seen in the separate "Mid-term Survey Document."

#### 2. PROJECT COORDINATING COMMITTEE (PCC) MEETING

##### 2.1 Issues discussed

The regular PCC meeting was held in Alor, NTT from 8-11 March. Matters discussed during this meeting are outlined below.

*i. Independence movement*

The growing independence movement in Papua Province has been directly impacting on project activities and outcomes in the field. Direct impacts have included :

- Interruptions to CD group and health cadre activities due to the involvement of a number of cadres in SATGAS PAPUA activities;
- A decrease in Project staff visits to the target areas due to warnings about non-Papuans visiting remote areas of Papua has resulted in poorer levels of supervision, support and assistance. Concerns for the safety for project personnel continues to be a major concern and the situation in the field is being closely monitored;
- Fears and uncertainty over the future of Papua were observed to be directly affecting the willingness of cadres to take part in the second exposure and training trip to East Java and are considered likely to impact on community perceptions and willingness to participate in other activities.

*ii. HIS – Sustainability and supply of forms*

The Health Information System which has been designed and implemented in Jayawijaya since 1998 at this point in time is facing a minor crisis due to a shortage of the various types of report forms in both the DHS offices in Wamena and in the Puskesmas. The DHS's explanation as to why they did not have a supply of these forms was that there was insufficient money in their budget to cover the cost of printing or copying the forms. The Puskesmas on the other hand, consider it to be the responsibility of the DHS to supply these forms.

*iii. Supervision Issues*

The lack of an understanding and ethos of supervision amongst government officers from the lowest to the highest levels continues to be a major problem. To date no way or mechanism has been found to overcome this major structural constraint on the efficiency and improvement of health and other government services.

*iii. Follow Up and Evaluation of Training*

In October 2000 the WATCH Project will finish. It remains unclear whether the Jayawijaya District Health Service will be willing and able to carry out follow-up activities such as refresher training or retraining (for health workers, midwives, and volunteers such as POD and Posyandu cadres and TBAs) so that capacity building of human resources and the health system in Jayawijaya and Papua can continue to be raised and the incidence of illness can be decreased.

*iii. Involvement of Unicef*

The UNICEF Papua Program intends to extend its activities to Jayawijaya District in early 2000. Of the four components of the main UNICEF program only one, the health section, will be implemented in Jayawijaya. This provides an opportunity to ensure that the maternal health

program initiated by WATCH can be taken up and further developed by another organisation in Jayawijaya. The actual form and strategy of the UNICEF activities has been developed after discussions with key stakeholders in Jayawijaya including the District Government, DHS and DHO, WATCH, MSF, local churches and the District Planning Body (BAPPEDA) who are acting in the capacity of team leader for this program

*vi. Continuation of Groups (Local NGO )*

At this point in time the ongoing sustainability of the WATCH Community Development Program is still in question. AusAID Indonesia has opened a window of opportunity by agreeing to fund a Project Partnership Program in Jayawijaya. It is hoped that the Project Partnership can be a means to ensure that the kinds of capacity building and community empowerment activities, which have been initiated by WATCH, can be taken up and further developed by other NGOs in Jayawijaya. It is also hoped community groups that were founded by WATCH and have shown good progress can continue to find support and assistance through the local NGO sector.

## **2.2 Results of the PCC**

*i. HIS*

It was agreed that WATCH would provide a supply of the various HIS recording and reporting forms to ensure that the assessment of the HIS can continue to at least up until May 2000. Once a final evaluation and necessary alterations have been made to the HIS a two year supply of the finalised forms would be supplied to the DHS who would then have responsibility for ensuring an ongoing supply of forms once these had run out.

*ii. UNICEF Program*

Using funding from AusAID, the UNICEF Papua Program intends to extend its KHPPIA or Safe Motherhood Program into Jayawijaya District. Under this program UNICEF intends to continue to support a number of initiatives originating from the WATCH Project. The initiatives, which UNICEF intends to continue to support, are as follows :

- The HIS will continue to be supported and developed and in particular the Case Management Protocols will be taught to health workers and volunteers from areas, which have not yet received attention or training from WATCH. The CMPs will also be expanded through the inclusion of “Integrated Management of Infant Illness for nurses.”
- Supervision issues will be overcome through the Bidan Penyelia (Supervising Midwife) Program which aims to foster an understanding and ethos of supervision and mutual support amongst Puskesmas and Village Midwives and TBAs.
- They will act to increase and strengthen the roles of the National Federation of Nurses and the National Union of Midwives in Jayawijaya;
- Add further IEC publications such as a thematic flip charts on “*Deliveries and Perinatal*,”
- Conduct Workshops in conjunction with WATCH to encourage continuity between the two programs.

### *iii. Partnership Program*

In response to the urgent need for NGO capacity building and community development programs in Jayawijaya, AusAID Jakarta have agreed to fund a Project Partnership Program in Jayawijaya. It is hoped that this program can begin in the near future (by around June 2000). The Project Partnership Program seeks to use established NGOs at the regional or national levels to develop the capacity of fledgling local NGOs and thus strengthen and develop the non-government development sector throughout Indonesia.

The NGO selected as Project Partner for Jayawijaya would be required to conduct capacity building, empowerment and organisational strengthening activities with 5 to 10 local NGOs. The main question at this time is whether an appropriate Project Partner can be found from within the regional NGO community?

# **Jayawijaya WATCH Project -**

## **Kanggime Extension**

**BI-MONTHLY REPORT**

**FEBRUARY / MARCH 2000**

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**ANNEXES**

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## Annexe 1 - Data on the Achievement of Health Section Key Indicator Targets

### Component. 1 Maternal and Infant Health

#### *Output 1. Appropriate maternal and infant health program consolidated*

A.

#### *B. 1.1 Promote registration on maternal health*

**Table 1a.i** *Number of pregnant women in Kanggime Sub-District (1999)*

MONTH	FIRST ANC VISIT (K1)	FOURTH ANC VISIT (K4)	HIGH RISK	TETANUS TOXOID VACCINATION 1	TETANUS TOXOID VACCINATION 2
January	28	2	16 (?)	17	13
February	10	4	13 (?)	3	6
March	10	1	0	0	0
April	16	0	5	0	0
May	-	-	-	0	0
June	11	2	0	0	0
July	30	2	4	77	15
August	15	0	10 (?)	17	13
September	2	0	1	2	9
October	22	0	1	18	7
November	22	4	17	21	31
December	19	11	8	19	43

*(Data source : Maternal & Infant Health Section, Jayawijaya District Health Service, 1999)*

**Table 1a.ii** *Number of pregnant women in Kanggime Sub-District (2000)*

MONTH	FIRST ANC VISIT (K1)	FOURTH ANC VISIT (K4)	HIGH RISK	TETANUS TOXOID VACCINATION 1	TETANUS TOXOID VACCINATION 2
January	35	6	13	39	32
February	17	4	12	16	17
March	7	2	6	7	15

*(Data source : Maternal & Infant Health Section, Jayawijaya District Health Service, 1999)*

**Table 1b.i** *Number of pregnant women in Mamit Sub-District (1999)*

MONTH	FIRST ANC VISIT (K1)	FOURTH ANC VISIT (K4)	HIGH RISK	TETANUS TOXOID VACCINATION 1	TETANUS TOXOID VACCINATION 2
January	35	14	13 (?)	27	19
February	22	9	3	0	0
March	26	8	6	19	19
April	27	12	3	0	0
May	22	6	1	0	0
June	96 (?)	18	26 (?)	30	5
July	20	10	17	4	17
August	12	15	11	4	19
September	17	15	16	10	11
October	17	12	19	-	-
November	No data				
December	No data				

(Data source : Maternal & Infant Health Section, Jayawijaya District Health Service, 1999)

**Table 1b.ii** *Number of pregnant women in Kembu / Mamit Sub-district (2000)*

MONTH	FIRST ANC VISIT (K1)	FOURTH ANC VISIT (K4)	HIGH RISK	TETANUS TOXOID VACCINATION 1	TETANUS TOXOID VACCINATION 2
January	No data				
February	No data				
March	No data				

**Table 2.a Promote registration of all delivery helped by midwives (1999)**

SUB-DISTRICT	TARGET PER YEAR	JAN-JUNE 1999	JULY 1999	AUG. 1999	SEPT. 1999	OCT. 1999	NOV. 1999	DEC. 1999	YTD CUM	% CUM
Kanggime	308	89	7	13	2	2	13	19	145	47
Kembu Mamit	286	92	9	14	12	12	-	-	139	48.0

(Data source : Maternal & Infant Health Section, Jayawijaya District Health Service, 1999)

**Table 2.b Promote registration of all delivery helped by midwives (2000)**

SUB-DISTRICT	TARGET PER YEAR	JAN 2000	FEB 2000	MARCH 2000	APRIL 2000	MAY 2000	JUNE 2000	YTD CUM	% CUM
Kanggime	418	9	11	10					
Kembu Mamit	307	-	-	-					

(Data source : Maternal & Infant Health Section, Jayawijaya District Health Service, 1999)

**Table 3.a Promote registration of all births (1999)**

SUB-DISTRICT	JAN-JUNE 1999	JULY 1999	AUGUST 1999	SEPT. 1999	OCT. 1999	NOV. 1999	DEC. 1999
Kanggime	135	13	17	10	4	19	25
Kembu Mamit	150	26	25	24	22	-	-

(Data source : Maternal & Infant Health Section, Jayawijaya District Health Service, 1999)

**Table 3.b Promote registration of all births (2000)**

SUB-DISTRICT	JANUARY 2000	FEBRUARY 2000	MARCH 2000	APRIL 2000	MAY 2000	JUNE 2000
Kanggime	11	12	12			
Kembu Mamit	-	-	-			

(Data source : Maternal & Infant Health Section, Jayawijaya District Health Service, 1999)

**Table 4a. Maternal Mortality Data February - March 2000**

SUB-DISTRICT	NUMBER OF CASES	CAUSE OF DEATH
Kanggime	1	Post-partum haemorrhage due to retention of the placenta.
Kembu / Mamit	-	-

(Data source : Maternal & Infant Health Section, Jayawijaya District Health Service, 1999)

**Table 4b. Infant Mortality Data February - March 2000**

SUB-DISTRICT	NUMBER OF CASES	CAUSE OF DEATH
Kanggime	5 (Feb 3 ; March 2)	Not yet known
Kembu / Mamit		Died during birth

(Data source : Maternal & Infant Health Section, Jayawijaya District Health Service, 1999)

### C. 1.2 Distribute Iron tablets, Pyrantel Pamoat and Chloroquine

**Table 5a.i Number of Pregnant Women who received Iron Supplements,**

***Chloroquine (Antimalarial) & Pyrantel Pamoat (Worming) tablets in Kanggime 1999***

MONTH	IRON TABLET	CHLOROQUINE	PYRANTEL PAMOAT
January 1999	11	42	-
February 1999	35	44	-
March 1999	13	34	-
April 1999	13	2	-
May 1999	-	-	-
June 1999	22	2	-
July 1999	18	48	-
August 1999	45	42	-
September '99	-	-	-
October '99	-	-	-
November '99	46	53	-
December '99	60	92	-

*(Data source : Maternal & Infant Health Section, Jayawijaya District Health Service, 1999)*

***Table 5a.ii Number of Pregnant Women who received Iron Supplements, Chloroquine (Antimalarial) & Pyrantel Pamoat (Worming) tablets in Kanggime 2000***

MONTH	IRON TABLET	CHLOROQUINE	PYRANTEL PAMOAT
January 2000	53	71	
February 2000	31	48	
March 2000	22	55	

*(Data source : Maternal & Infant Health Section, Jayawijaya District Health Service, 1999)*

**Table 5b.i** *Number of Pregnant Women who received Iron Supplements, Chloroquine (Antimalarial) & Pyrantel Pamoat (Worming) tablets in Kembu / Mamit 1999*

MONTH	IRON TABLET	CHLOROQUINE	PYRANTEL PAMOAT
January 1999	17	12	0
February 1999	11	7	0
March 1999	13	8	0
April 1999	11	9	0
May 1999	10	7	0
June 1999	24	28	0
July 1999			
August 1999			
September 1999			
October 1999			
November 1999			
December 1999			

(Data source : Maternal & Infant Health Section, Jayawijaya District Health Service, 1999)

**Table 5b.ii** *Number of Pregnant Women who received Iron Supplements, Chloroquine (Antimalarial) & Pyrantel Pamoat (Worming) tablets in Kembu / Mamit 1999*

MONTH	IRON TABLET	CHLOROQUINE	P. PAMOAT
January 2000			
February 2000			
March 2000			

(Data source : Maternal & Infant Health Section, Jayawijaya District Health Service, 1999)

**D. 1.3 Immunise all infants (0 –11 months)**

*Table 6a.i The number of babies immunised in Mamit Community Health Centre*

**January – December 1999 :**

MONTH	BCG	DPT 1	DPT 2	DPT 3	POLIO 1	POLIO 2	POLIO 3	POLIO 4	MEASLES
January	42	45	26	16	46	26	16	18	14
February	53	59	41	30	59	41	27	32	24
March	-	-	-	-	-	-	-	-	-
April	31	34	71	39	34	71	39	110	48
May	45	45	54	48	45	54	50	76	45
June	22	59	49	51	59	49	51	102	52
July	24	51	61	56	51	61	56	75	55
August	25	60	56	46	60	56	46	81	62
September	26	74	62	64	74	62	64	129	89
October	40	42	44	39	42	44	39	42	35
November	24	55	56	62	55	56	62	116	124
December									

*Data source : Posyandu Infant Health Master Records : Maternal & Infant Health Section; and Infectious Diseases Eradication Section Jayawijaya District Health Service*

**Table 6a.ii The number of babies immunised in Mamit Community Health Centre January – March 2000 :**

MONTH	BCG	DPT 1	DPT 2	DPT 3	POLIO 1	POLIO 2	POLIO 3	POLIO 4	MEASLES
January	32	62	54	55	62	54	60	115	69
February	27	50	50	39	50	50	39	81	63
March	-	-	-	-	-	-	-	-	-

*Data source : Posyandu Infant Health Master Records : Maternal & Infant Health Section; and Infectious Diseases Eradication Section Jayawijaya District Health Service*

**Table 6b. The number of babies immunised in Kanggime Community Health Centre January-December 1999 :**

MONTH	BCG	DPT1	DPT2	DPT3	POLIO 1	POLIO 2	POLIO 3	POLIO 4	MEASLES
January	25	19	13	28	22	19	23	17	23
February	-	-	-	-	-	-	-	-	-
March	-	-	-	-	-	-	-	-	-
April	8	20	15	19	18	16	11	9	12
May	6	18	15	16	20	15	16	8	11
June	The District Health Service conducted an immunisation sweep during this June 1999								
July	172	172	101	49	172	101	49	72	97
August	47	47	72	112	47	72	112	33	62
September	49	39	51	25	36	51	25	16	29
October	62	62	31	40	35	31	40	22	40
November	54	54	66	62	54	66	62	55	38
December	82	82	51	58	82	51	58	63	52

*Data source : Posyandu Infant Health Master Records : Maternal & Infant Health Section; and Infectious Diseases Eradication Section Jayawijaya District Health Service*

**Table 6b.ii The number of babies immunised in Kanggime Community Health Centre January-March 2000 :**

MONTH	BCG	DPT1	DPT2	DPT3	POLIO 1	POLIO 2	POLIO 3	POLIO 4	MEASLES
January	25	19	13	28	22	19	23	17	23
February	104	104	78	77	104	78	77	97	89
March	53	53	40	45	53	40	45	32	30

*Data source : Posyandu Infant Health Master Records : Maternal & Infant Health Section; and Infectious Diseases Eradication Section Jayawijaya District Health Service*

**Annexe 2 - Data on the Achievement of Gender & Development Section Key Indicator Targets**

**Component. 2 Gender and Development**

***Output 4. Existing community development initiative strengthened***

**Table 1a. Community Development Groups in Kanggime Sub-District**

GROUP NAME	ACTIVITIES OBSERVED DURING THE SUPERVISION VISIT	GROUP STATUS (NEW/OLD)	EVALUATION OF THE GROUPS DEVELOPMENT
Luabaknom	1. Nutrition Garden; 2. Chicken Raising; 3. New POD;	New	This group's progress is satisfactory.
Bogonuk	1. Site preparations have been carried out for a demonstration LEISA garden; 2. Rabbit cages have been repaired; 3. POD and Posyandu exist.	Old	This group's progress is satisfactory.
Andomak	1. A garden has been prepared in the housing compound for a nutrition plot; 2. Chicken coops exist but they are not being utilised.	New	This group's progress is not satisfactory.
Terokme		New	The status of this group is unclear. The group organiser lives in Kanggime, not at the group's location. At present the group is being organised by the local preacher.
Yigonikme		New	No information is available. No group members were met during the visit as most of the community had gone to the forest to cut and carry timber for a new church.
Abera	This group has rabbit cages and fish ponds however these are not properly maintained.	Old	This group's progress is not satisfactory.
Yinggungga			This group has not been active.
Timopur			This group has not been active
Kubu	1. Demonstration rabbit cages; 2. Demonstration chicken coops; 3. Nutrition garden; 4. Fruit tree orchards.	New	This group's progress has been very good.
Jambilia	1. Goat raising – this group has a herd of 12 goats.	New	This group's progress has been very good.

**Table 1a. (Continued) - Community Development Groups in Kanggime Sub-District**

GROUP NAME	ACTIVITIES OBSERVED DURING THE SUPERVISION VISIT	GROUP STATUS (NEW/OLD)	EVALUATION OF THE GROUPS DEVELOPMENT
Yaliwak	1. Chicken raising; 2. Nutrition garden	Old	This group's development is not satisfactory.
Pagona	1. Chicken raising;	New	This group's development is not satisfactory.
Wondame	1. Chicken raising; 2. Nutrition garden; 3. Demonstration rabbit cages (but no rabbits yet); 4. Fruit tree orchards (avocado, longans, mandarines & other citrus, jackfruit and local fruit trees); 5. Revegetation activities; 6. POD exists.	Old	This group's progress has been excellent.
Nunggawi	The group's location is not being properly maintained.	New	This group has not progressed.
Belep		New	Activities implemented by this group are not yet apparent.
Kanggineri		New	Activities implemented by this group are not yet apparent.
Erugwi		New	Activities implemented by this group are not yet apparent.
Total 17 CD Groups			

**Table 1b. Community Development Groups in Kembu-Mamit Sub-District**

<b>GROUP NAME</b>	<b>ACTIVITIES OBSERVED DURING THE SUPERVISION VISIT</b>	<b>GROUP STATUS (NEW/OLD)</b>	<b>EVALUATION OF THE GROUPS DEVELOPMENT</b>
Witini	This groups activities are not apparent	New	This group is not progressing.
Yali	Agriculture	New	This group is beginning to develop.
Tenogwi	Agriculture	New	This group is beginning to develop.
Konega	This group is starting to prepare new gardens and livestock cages.	New	This group is only beginning to be active.
Emaus	This groups activities are not apparent	New	This group is not progressing.
Neleme	This group is starting to prepare new gardens and livestock cages.	New	This group is only beginning to be active.
Wamberak	This group is starting to prepare new gardens and livestock cages.	New	This group is only beginning to be active.
Nolo	Agriculture Building livestock cages	New	This group is beginning to develop.
Geneam	This group is starting to prepare new gardens and livestock cages.	New	This group is only beginning to be active.
Liwote	This group is starting to prepare new gardens and livestock cages.	New	This group is only beginning to be active.
Lunggogwe	This group is starting to prepare new gardens and livestock cages.	New	This group is only beginning to be active.
Napugum	This group is starting to prepare new gardens.	New	This group is only beginning to be active.
Yibalo	This group is starting to prepare new gardens and livestock cages.	New	This group is only beginning to be active.
Ibuger	Agriculture Animal Husbandry	New	This group's progress is satisfactory.
Gilu	This group is starting to prepare new gardens and livestock cages.	New	This group is only beginning to be active.
Yogweme	This group is starting to prepare new gardens and livestock cages.	New	This group is only beginning to be active.
Yowo	Agriculture Animal Husbandry	New	This group is beginning to develop.

Table 2a. List of participants in agriculture/animal husbandry training, Mamit January 2000

NO.	GROUP	CHURCH	NAME
1.	Witini	Witini	Gerinda Wonda
2.	Konega	Konega	Nibanus Kogoya
3.	Neleme	Neleme	Neli Wakur
4.	Wamberak	Ndu-ndu	Dimes Weya
5.	Yaragi	Yaragi	Dekinus Wakur
6.	Nolo	Nolo	Yanius Wonda
7.	Yibalo	Yibalo	Eiles Enembe
8.	Geneam	Geneam	Selenus Yikwa
9.	Liwote	Liwote	Nanoringgen
10.	Nabugum	Nabugum	Terina Narek
11.	Tingiringge	Tingiringge	Ebanus Wonda
12.	Ibuger	Ibuger	Yamiles Wonda
13.	Emaus	Emaus	Neti Wakur
14.	Yowo	Yowo	Batina Wakur
15.	Gilu	Gilu	Martin Weya
16.	Ibuger	Ibuger	Merdina Kogoya

Table 2b. List of participants in agriculture/animal husbandry training, Kanggime January 2000

NO.	GROUP	CHURCH	NAME
1.	Luabaknom	Luabaknom	Kinen Wonda
2.	Andomak	Andomak	Kiwe Kogoya
3.	Terokme	Terokme	Yiknip Wonda
4.	Yigonikme	Yigonikme	Pondok Weya
5.	Abera	Abera	Wuwemili/Pubunggen
6.	Yingguga	Yingguga	Dinas Kogoya
7.	Timopur	Timopur	Yance Geley
8.	Kubu	Kubu	Dius Gire
9.	Yambiliya	Yambiliya	Water Wonda
10.	Pagona	Pagona	Kenenak Tabuni
11.	Wondame	Wondame	Karel Tabuni
12.	Nunggawi	Nunggawi	Wangga Lambe
13.	Belep	Belep	Elison Gire
14.	Kanggineri	Kanggineri	Elpius Weya
15.	Apeler	Tinggom	Akimur Wonda
16.	Dimbogu	Dimbogu	Waimili Wakur
17.	Dolunggun	Dolunggun	Yelimus Narek
18.	Ewan	Ewan	Kerimis Kogoya
19.	Tipura	Lerewere	Dani Wanimbo
20.	Yaliwak	Yaliwak	Minus Kogoya

### **Annexe 3** **yayasan humi inane**

#### ***i. Mission:***

The mission of this new foundation, as stated in their constitution is as follows :

To empower women in the interior of Jayawijaya in particular as well as throughout other parts of Papua Province so as to ensure that they can :

- A. Conceive, understand and actively strive for and enjoy their basic human rights as women in all aspects (political, economic, social, cultural and personal safety) of their private, family, communal, ethnic and national lives;
- B. Enjoy equality and justice in the eyes of the law;
- C. Enjoy social and economic justice in their families and communities;
- D. Obtain knowledge and skills through formal and non-formal education;
- E. Obtain physical and spiritual health and well being on a personal, family and community level;
- F. Develop pride and self reliance;
- G. Develop a sense of social responsibility towards their community and nation.

#### ***ii. Proposed programs and activities :***

In order to work towards these goals Yayasan Humi Inane plans to implement a number of programs in the following areas :

1. Human rights, Advocacy and Law Section – They intend to establish a consultation room and legal advice service for women and the broader community;
2. Education, Training and Research Section – They intend to conduct women’s skills training programs, conduct research activities into problems facing women, develop IEC materials to assist with the training of women, and establish an information centre for problems relating to women;
3. Women and Children’s Health Section – They intend to carry out awareness programs on reproductive health, STD and HIV/AIDS and children’s health;
4. Economic Development Section – They intend to conduct family and community economic development activities and empower women so they can have greater control over the profits generated through economic activities;
5. Social and Political Section – They intend to train and prepare selected cadres to take a more active and leading role in social and political activities.

#### ***iii. Foundation Directors:***

The composition of the Board of Directors of Yayasan Humi Inane as well as the identity, education and cultural/social background of each of the board members is described below in table 12. All of the board members are women of Papuan descent and between them they represent the major tribal or cultural groups of Papua.

Table 1. Members of the Board of Directors of Yayasan Humi Inane

POSITION	NAME	EDUCATION	CULTURAL BACKGROUND
Director	Dra.Salomina Yaboisembut	Sekolah Tinggi Filsafat dan Theologi 'Fadjar Timur' Jayapura	Sentani Depapre
Deputy Director	Ribka Haluk	Fakultas Sosial Politik Uncen, Jurusan Sosiologi	Dani, Baliem Valley Pugima
Executive Secretary I	Ester Afasedanya	Fakultas Sosial Politik Uncen, Jurusan Administrasi/Pemerintah	Jayapura Tanah Merah
Executive Secretary II	Herlina S. Kogoya	Sarjana Ekonomi, Uncen	Lani Kec Makki
Treasurer I	Yosefine Huby Kosay	SMP	Dani, Baliem Valley Isokma area
Treasurer II	Elisabeth Pigay	Sekolah Pendidikan Guru (setara SMA)	Mee / Ekagi Paniai District

At this point in time the foundation has already become actively involved in a number of activities including:

- Participating in a workshop on human rights;
- Participating in a training workshop on reproductive health, which was organised and conducted by the Eastern Indonesia Women's Network (Jaringan Perempuan Indonesia Timur);
- Supervising and assisting a number of local women's groups around Wamena.

Furthermore, the foundation has already been approached by representatives of the National Planning Body (BAPPENAS) / UNDP Community Empowerment Program (Program Pemulihan Keberdayaan Masyarakat) with a request that Yayasan Humi Inane work together with BAPPENAS and UNDP in administering and implementing part of the PKM Program.

**Annexe 4**  
**second exposure trip to java**

*Table 1. List of Cadres sent to East Java as part of the second Exposure Trip II*

<b>SUB-DISTRICT</b>	<b>ORIGINALLY PLANNED PARTICIPANT</b>	<b>SEX</b>	<b>DEPARTED</b>	<b>REASON</b>	<b>REPLACEMENT</b>	<b>SEX</b>	
<b>Kanggime</b>	Dani Wanimbo	M	Yes		Dani Wanimbo	M	
	Wayu Kogoya	M	No	Refused	Birimus Gurik	M	
	Yelimus Narek	M	Yes		Yelimus Narek	M	
	Kinen Wonda	M	No	Illness	Kenius Wonda	M	
	Leleki Gire	F	Yes		Leleki Gire	F	
	Karel Tabuni	M	No	Refused	Oscar Gurik	M	
	Minus Kogoya	M	No	Cadre's child is ill	Pular Wanimbo	M	
	Matius Weya	M	No	Illness	Elpius Weya	M	
	Dius Gire	M	No	No excuse given	Yambegukban W.	F	
	Alina Gurik	F	Yes		Alina Gurik	F	
	Ambe Wonda	M	No	Health reasons	No Replacement		
	<b>Kembu Mamit</b>	Sem Weya	M	No		Kerowa Weya	M
		Dekinus Wakur	M	No		Eles Enembe	M
Yatan Wanimbo		M	No		Yomenus Narek	M	
Yarpes Wanimbo		M	Yes		Yarpes Wanimbo	M	
Yanus Kogoya		M	Yes		Yanus Kogoya	M	
Ebanus Wonda		M	Yes		Ebanus Wonda	M	
Tenggerengge E.		M	Yes		Tenggerengge E.	M	
Dimes		M	No	Refused	Tiyus Wanimbo	M	
Bake Weya		F	No		No Replacement		
Wewot Wenda		M	No		No Replacement		
Selenus Yikwa	M	No		No Replacement			
<b>Total</b>	22				18		

## **Annexe 5**

### **SURVEY METHODOLOGY**

#### **1.1.1 Questionnaire**

The questionnaire which was used for the annual KPC survey was designed based upon previous project interventions, a variety of questionnaires used in previous surveys and a generic questionnaire which was developed by the Child Survival Support Program (CSSP) at the John Hopkins University. Aspects which were investigated included breast feed and child nutrition, maternal nutrition and health, diarrhoea, pneumonia and malaria, immunisation, family planning and sanitation. These aspects were looked at in terms of knowledge, practice and coverage so that the main indicators for physical activities and health education can be evaluated.

#### **1.1.2 Survey Training**

The survey team comprised 15 interviewers, who are final year students at the SPK completing their course's fieldwork requirements, and four supervisors who are senior staff of the Health Division. Several staff from the community development division also reinforced this team. Prior to the survey a three-day training course was held to train members of the survey team in various aspects of conducting the survey. These included: introducing the survey; cluster sampling technique; determination of sample sizes; aspects relating to women and children's health, nutrition and immunisation; understanding and using the questionnaire and selection of respondents. Skills and techniques in communication, sharing, discussion and simulation were also covered. *Survey Trainers Guide for PVO CS Project Rapid KPC Survey 1994* was used as the main reference for this training.

#### **1.1.3 Clustering**

The rapid survey method was originally designed and developed for the WHO Expanded Program on Immunisation and are known as technique 30 – clusters sampling survey. This technique employs a two-stage cluster-sampling program. Clustering is the first step of the program. This involves the definition and selection of clusters based upon the principle of *probability according to size*. The goal of clustering is to reduce bias, which may occur when respondents are selected on an individual basis. Such selection methods may result in the majority of respondents being concentrated in geographically limited area within the entire project area which in turn can result in the results of the survey being unrepresentative of a large portion of the target group.

#### **1.1.4 Sampling and number of respondents**

The second stage of the rapid survey technique is respondent sampling. *The EPI Coverage Survey Training Manual (WHO, 1988)* and *Metode Survei Cepat (Pusat Data Kesehatan DepkesRI, 1996)* propose a sampling criteria involving simple random samples made during visits to settlements throughout the survey area. Due to the fact that settlements in the project area are spread over large and extremely rugged areas it was not feasible for the survey team to reach these remote settlements and collect a proportionally representative sample. As

compromise news was sent out by courier to the more remote communities to inform them that the survey team had arrived in that cluster in order to meet with potential respondents at a specified meeting place. In cases where there were more potential respondents than was required for the sample in each cluster the final selection of respondents was made by lottery.

In order to increase the precision of the survey an increase in the sample size is required. Based on past experience a sample size of 210 (7 respondents per cluster) is precise enough for management purposes. In this survey a final target sample size was set at 300 respondents with a total of 270 respondents actually realised in the course of the survey.

## **1. Data gathering**

The survey team was split into 3 groups with each group surveying between 8 and 11 clusters. The allocation of clusters was made according to geographical proximity and accessibility via local walking trails. Interviews with women were conducted after respondent sampling was carried out. The criteria for respondents were that they must be women with children between 0 and 23 months old.

## **1. Data Analysis**

The results of interviews, once their accuracy was checked by the team supervisor and classified according to cluster, were then sorted using the computer program EPI Info 6.01 which was developed by *The Division of Surveillance and Epidemiology, Centre for Disease Control and Prevention, CDC, 1994.*