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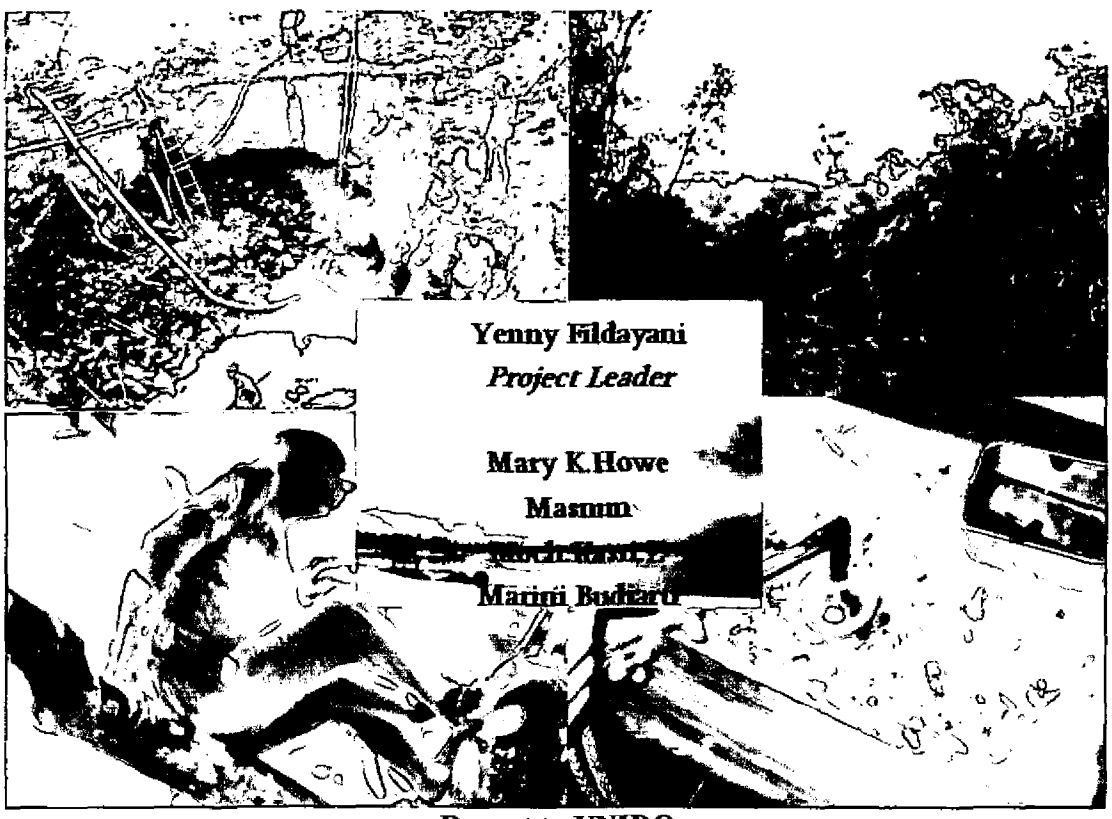
FNPF

Friends of the National Parks Foundation

Raising General Community Awareness on the Health Risks of Mercury and Introducing Cleaner Technology for Gold Recovery along the Sekonyer River, Kota Waringin Barat District, Central Kalimantan, Indonesia



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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

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EXECUTIVE SUMMARY

This report describes the awareness campaign activities conducted in two small scale gold mining communities of Rasau and Aspai, located near Kumai, Kota Waringin Barat District, Central Kalimantan, Indonesia. Friends of the National Park Foundation (FNPF) has implemented this project for 6 months from September 2006, to February 2007 under the coordination of the Global Mercury Project (GMP) of the United Nations Industrial Development Organization (UNIDO). The objective of the project is to raise awareness on the health risks of mercury and introduce cleaner technology of gold recovery from small-scale gold mining activities.

Small-scale miners have been mining alluvial gold for approximately 24 years along Sekonyer River, Kota Waringin Barat District, Central Kalimantan. Miners have employed both land mining (hydraulicking) and river dredging methods. The two biggest mining sites along this river are Rasau and Aspai, both areas have been mined for about 20 years. In addition to gold, zircon has just been discovered and mined for about two years. Small children and their mothers are regularly spotted working side-by side with men, performing tasks usually carried out by men. This increases potential mercury exposure to child-bearing age women, one of the most vulnerable target population. Land mining occurs in both Rasau and Aspai, while river dredging occurs in Aspai mining sites. Mining has impacted the river ecology and the health of communities living around Tanjung Puting National Park, located on the east side of Sekonyer River . In the long term it poses a threat to the flora and fauna biodiversity protected within the park's boundary.

FNPF's technical team has fabricated three retorts: the pipe, Fauzi's, and kitchen bowl retorts in a manner described in GMP publications. Amalgamation barrel and fume hood retort were also built for demonstration. Miners were also taught to reactivate floured mercury. Introduction of cleaner technology was directed to miners, related government officers and gold shop owners. In Rasau the team worked with village head and mine owners. Based on the interview with miners, the best estimate of total gold produced is 18.45 kg/year from Rasau and 32.2 kg/year from Aspai Sebrang.

In order to identify mercury concentrations in the environment and in humans, a total of 163 samples of soil, fish, human hair and blood were collected. The concentration of the total mercury in *Ikan Harwan* and *Ikan Baung* from the Sekonyer River were higher than recommended by WHO (0.5 mg/kg). Analysis of human hair samples was conducted by Dr. Shunichi Honda from the National Institute of Minamata Disease (NIMD) in Japan. Total Mercury (THg) concentrations of hair samples from zircon miners, burners, mixers, shop owners, and housewife were relatively higher compared to other occupations.

Twenty four out of 105 hair samples (12 samples from mining sites, 9 from Sekonyer River village and one from Kumai) exceeded 50 μg/g total Mercury (THg) (threshold for onset of neurological symptoms in human body), 12 μg/g methyl mercury (MeHg) (a benchmark-dose lower confidence limit for maternal hair for child bearing age women) and 2.3 MeHg. μg/g (PTWI: a provisional tolerable weekly intake). The overall average of THg concentration is 9.± 11.6 μg/g ± for men, 13.4± 17.4 for women, and 15.7 ±18.1μg/g for women (child bearing age: 15-45). The overall THg in women and women in the child bearing age category are 60 to 70% higher than the overall males, this may be due to the fact that in these communities, women participate in ore processing and even amalgam burning, unlike other mining communities, where men tend to perform all steps of mining and processing. The overall average concentrations of this mining community is much higher than Total Hg concentrations in the hair samples of general population collected from other Asian countries (reference to Honda;s report)

To disseminate information, FNPF formed a team of five experts trained in health and technical issues. The team has educated miners, miner's family, government officers, villagers and school children, about the health risks of mercury and potential exposures from breathing mercury vapor and from eating contaminated fish. Discussion on health impact of mercury exposure during a health program was broadcasted by Primadona, a local radio station An article published in the local newspaper, provided readers with information regarding the extent of contamination along the Sekonyer River, including mercury concentrations in fish samples. In addition, FNPF's campaign team also went to the elementary and high schools around Kumai and Pangkalan Bun to educate a number of students between the ages of 10 - 18 years of age. A survey following the campaign shows that for general public, awareness has increased by 50.5%, while among students it is only 38.7%.

1. INTRODUCTION

This report summarizes FNPF's activities during the campaign to raise awareness on health risks of mercury exposure and introduction of cleaner technology for gold recovery. Trainers worked closely with two mining communities in Aspai and Rasau along Sekonyer River, and surveyed the gold shops in Pangkalan Bun, Kota Waringin Barat District, Central Kalimantan for six months from September 2006 to February 2007. Various methods were employed to educate specific target population, in addition to demonstration of retorts directly to miners. A brief description of the mining communities is followed by field activities and concluding remarks.

2. DESCRIPTION OF PROJECT AREA

2.1 Geography

Rasau and Aspai mining sites are parts of the Kota Waringin Barat District, located geographically at 1°19'- 3°36' South and 110°25- 112°50' East. These areas are located on the south coast of the world's largest tropical rain forest in Borneo, in the Indonesian province of Central Kalimantan, Kota Waringin Barat District. Predominantly flat, undulating to an altitude 0-100 above sea level, this area lies across the Sekonyer River, which is the west border of the Tanjung Puting National Park, the only park in South East Asia that protects almost 10 percent of the total population of orangutans in the world, eight other primates, and many other wildlife species and biodiversity. Mining activities have had an adverse effect on the wildlife of Tanjung Puting National Park.

The exact locations of both mining communities were recorded using GPS (Global Position System). Mr. Agus Lelono, an officer from the Tanjung Puting National Park Authority, assisted us in making the maps of the mining location. Referring to the map, the community that could be impacted by the mining activities will be Sekonyer River village, and Kumai area.

2.2 Government and Demography

Kota Waringin Barat District is lead by *Bupati*, Mr. Ujang Iskandar, with office in Pangkalan Bun, capital of the district. Mr. Iskandar was elected a year ago and he owns a zircon mining business. Kota Waringin Barat has the area of 10.795 km2 and 198.367 inhabitants. This district has no Mining and Energy Office, but there is Office of Environmental Impact Management (*Bapedalda*) that do not pay much attention to the mining activities in Sekonyer River area. Health care for the communities in the area of Sekonyer River is very limited and is derived from a government-funded nurse practitioner. The salary for the visit to the mining sites is currently funded by FNPF. A *Puskesmas Pembantu* (government health clinic) is located at

Desa Sungai Sekonyer. No health studies, surveys or baseline data has been gathered to develop a comprehensive view of health effects due to mercury exposure on the human inhabitants. There have been complaints of skin problems, presumably caused by mercury. Hepatitis, tuberculosis, and malaria are suspected to be common, and there is currently a malaria outbreak in Aspai that has drawn the attention of the local and central health authorities. According to the Health Centre (*Puskemas*) Kumai officer's information, World Health Organization has donated mosquito nets to be distributed to the miners for malaria protection.

Sungai Sekonyer is the nearest village from Rasau and Aspai mining sites, and approximately 100 people live there. There are some of the villagers presently work as miners. Sungai Sekonyer village and Tanjung Harapan post where the Park Rangers and staff from FNPF and Orangutan Foundation International (OFI), another NGO work, are situated directly across the Sekonyer River from each other.

All the communities on the Sekonyer River are accessible only by boat. Mining communities are remote, isolated, and the people have no access to jobs other than illegal mining, logging or poaching. There is no access to education for children living in Aspai and Rasau, and limited health care for the miners. Some children of school age attend schools in Kumai if they have family in Kumai and can afford the education costs. Small children, 2-5 years of age, have been observed helping their mothers to collect zircon or playing in the area where the mother is doing amalgamation. A cycle of poverty develops and contributes to the continuity of activities that degrade the environment.

2.3 Rasau and Aspai Mining Sites

Rasau and Aspai mining sites are the largest gold mining communities along the Sekonyer River. Both sites have been mined for about 20 years. The gold miners are using both hydraulic pumps for terrestrial and dredges to mine the riverine deposit in Aspai; but only using hydraulic pumps to mine terrestrial deposit in Rasau. When we surveyed Aspai, there were seven separate groups of people mining in the river, or known here as *melanting*. Because these two mining sites are immediately across the Tanjung Puting National Park, miners sometimes also mine inside the park when they have a chance. At least nine illegal miners were caught mining in the National Park by the forest police during our campaign.

Zircon deposits were discovered at both sites about two years ago and mining has primarily focused on zircon production since that time. However, the majority of miners have sluice boxes set up for both zircon and gold recovery. The amount of gold being produced and mercury lost is still undetermined at this time. The gold price in these areas is about IDR 160,000/

gram (~US$ 17.20) and mercury is IDR 800.000/kilogram (~US$ 86.02). Mercury losses from amalgamation and burning process seem to be quite common. It is difficult to determine the ratio for gold produced and mercury losses, but we estimated 1 part of gold produced, 2 – 2.5 parts of mercury are used.

Rasau Mining Site

This area, about 422 m2 wide, has been recognized by the Local Government as a "*Dusun*" (under the authority of a village). There are about 100 families live in this dusun. The head of the "Dusun" is the boss of the gold mining and he has been mining there since 1987. It is located about 50 kilometers from Kumai, the nearest town and harbor. It takes one and a half hours by speedboat, or 3 hours by *kelotok* (local form of boat transportation).

In March 2006, FNPF staff visited Rasau and observed that the Head of the Village, Mr. Haji Satri, had a torch setup on his front porch to burn the amalgam for miners. The fumes went directly into the surrounding community. He had a small, commodities store in his house, immediately adjacent to where the gold amalgam was burned, and there were two "warung makan" (small restaurants) where people in the community could buy meals, food and goods, located directly across the path from his porch. Women and children were observed living in the houses on either side of this torch unit, less than 20 feet from, where the burning process was occurring. The same condition has been occurring in Aspai, and both mining sites have access to the same river, Sekonyer River. There were 38 sluice boxes identified during survey we launched on October 30, 2006. One group of miners consisted of 2-5 people, and it means about 76 - 190 miners mine in Rasau.

Average gold produced in rough estimation from Rasau site, in the year 2006, was 4.1 gram/day/group or 1.230 kg/year/group. If there was only 15 groups mining gold in this area, total gold produced would have been 18.45 kg per year.

Aspai Mining Site

Aspai is the largest mining area in Sekonyer River area and located on the north of Rasau mining site. We could not get the numbers of how many people were living in this mining site, but from our research we assumed more than one thousand people live there.

The mining operations in Aspai have been going on for more than 20 years, but the use of mercury to amalgamate the gold has only been in use for approximately the past 10 years. Miners obtained the alluvial gold particles by the hydraulic digging of pits on the land adjacent to the river, and using a sluice table system as a means of separating the gold particles, which settled out

and were trapped in carpets which lined the sluice table. Many of the sluice tables were located at the waters edge, or in some cases, in the water. The operation of the sluice tbles produced heavy levels of sedimentation in the Sekonyer River, degrading approximately 100 kilometers of the river. Most of the operations were small-scale and utilized simple extraction methods. The carpets on the sluice tables were rinsed at the end of the day, and a concentrate of heavy sand and gold particles were collected in a bucket. Mercury was added to the bucket and stirred by hand to form the gold/mercury amalgam. Men and women, performed this amalgamation process. Mercury excess and the contaminated tailings were discharged directly into the river or amalgamation ponds. Then, amalgam was burned and this process conducted in kitchens or porches.

When we conducted a survey at the beginning of this project, we were led by local people and some miners to a new site called Aspai Sebrang, and extension of Aspai mining area. In year 2005, they found a large amount of gold in this site (50-70 gram per day for about a month). The boss of this Aspai Sebrang was Mr. Supian, who was known as a founder of that mining site, with whom we established cooperation for the campaign. Mr. Supian employed nine groups of miners, with 3-6 people per group.

In Aspai, 44 (of 46 miners extracted zircon) simultaneously mine gold and zircon. While in Aspai Sebrang, there were 14 groups of miners who actively mined gold. Each group consisted of 3-5 people or about 42- 70 miners working in this site. Average gold produced from Aspai Sebrang was roughly estimated about 7.7 gram/day in 2006, or 46.2 gram/week, or about 2.3 kg/group in year 2006 (with assumption 6 working days/week and 2 weeks yearly holiday). So, estimated total gold production from Aspai Sebrang was 32,2 kg/year. At the end of our campaign in February 2007, we were informed that 4 groups of miners found about 70 gram/day /group for about a week period of time.

3. PROJECT DELIVERY

3.1 Training of Trainers (TOT)

Two of the personnel, Drh. Yeni Fildayani and Ms. Mary Kathleen Howe, working on this project had received the health and technical trainings conducted by UNIDO in February and September 2006, in Rungan Sari – Central Kalimantan.

3.2 Sampling and Results of Fish and Human Samples

In order to obtain baseline conditions, we have collected some samples, including fish, sediment, and human's hair and blood samples. Fish samples were collected from Sekonyer River and the market in Kumai. 105 hair samples have been collected from the miners and the non

miners for the mercury level test, while some blood samples have been collected to compare the testosterone level of the miners. Although this activity was not funded by UNIDO, the results are important to confirm mercury has contaminated the residents and fish from the area.

Fish represents a large part of the local diet in all of the communities. This information was obtained from survey by interviewing miners and families. People eat fish at least three times a week. In order to know if local fish are safe to eat and to ascertain which species have lower levels of mercury/methyl mercury, we have collected several species in September and November 2006. In total, we collected 6 specimens of 6 different fish species (*Otek, Telang, Tenggiri, Sulungsungan, Tunda, Kakap Merah*) and 2 specimens of shrimps from Sekonyer River. In December, 12 species of fish were purchased from the local market and 2 from Sekonyer River. We sent 14 different species of fish (*Bawal Hitam, Kakap, Harwan, Baung, Bawal Putih, Tongkol, Selar, Baji Batang, Sembilang, Cumi-cumi, Runtu, Kepiting and Kapah and shrimp*) for analysis in Institute of Health Laboratory(*Balai Laboratorium Kesehatan*), Palangka Raya.

The result of the two species of fish that have been collected from the upstream of mining communities on Sekonyer River both show a high level of total mercury. The concentration of total mercury in *Ikan Harwan* was 1.357 mg/kg and in *Ikan Baung* was 0.553 mg/kg, all were above the value recommended by WHO (0.5 mg/kg). The result from the fish collected from the Kumai local market present a range of mercury concentrations. Concentration of 0.869 mg/kg was detected in *Ikan Runtu* and 0.436 mg/kg in *Ikan Nabi Batang*. Concentration of the remaining samples were less than 0.1 mg/kg. Additional result of the first fish sample collection is still pending. The sample were stored in UNIDO office for a couple of months and are currently being analysed in Institute of Health Laboratory (Balai Laboratorium Kesehatan), Palangka Raya. In addition, we have also collected some sediment from both Rasau and Aspai mining sites which concentration was found in the range of 0.104 – 0.153 mg/kg.

Hair samples (105 in total) from the miners and some non miners have been collected during the campaign. 55 samples were collected from the mining sites (Rasau and Aspai), 44 samples from Sekonyer River village, and 6 samples from Kumai. All of the hair samples have been submitted to the National Institute of Minamata Disease (NIMD) in Japan for analysis by Shunichi Honda, PhD., using CVAAS / Circulation Open Air Flow System, an Automatic Mercury Analyser and GLC-ECD (Gas Liquid Chromatography Capture Detection) method. The results from 105 hair samples were as follows:

- 22 samples (12 samples from mining sites, 9 from Sekonyer River village and 1 from Kumai) exceeded

- 50 µg THg/g (threshold for onset of neurological symptoms in human body);
- 12 methyl mercury (MeHg) µg/g (a benchmark-dose lower confidence limit for maternal hair for child bearing age women); and
- 2.3 MeHg µg/g (PTWI: a provisional tolerable weekly intake).

- Total mercury (THg) of 4 samples were more than 50 µg/g which is associated with a 5% risk of neurological symptoms such as fatigue, irritability, and depression in adults.
- 5 samples had methyl mercury of more than 12 MeHgµg/g that might result in inferiority on the neuropsychological performance test performance compared to other children at age 7 years old.
- 18 samples had more than 2.3 MeHg µg/g which is defined as the most sensitive toxicological end-point (development neurotoxicity) in the most susceptible humans.
- Total mercury of zircon miners, burners, mixers, shop owners, and housewife were relatively higher than those of other occupations.

The overall average of THg concentration is 9 ± 11.6 µg/g for male, 13.4 ± 17.4 for female, and 15.7 ±18.1µg/g for female (child bearing age: 15-45). These concentrations are much higher than Total Hg concentrations in the hair samples of general population collected from other Asian countries (reference: report by Shunichi Honda, PhD.). It is interesting to note that overall THg in females and female child bearing age are 60 to 70% higher than the overall males. This may be due to the fact that in these communities females participated in ore processing and even amalgam burning, unlike other mining communities, where males tend to perform all steps of mining and processing.

Mercury leads to lower testosterone (male hormone) levels. Testosterone production is zinc dependent. Mercury interferes with zinc metabolism and thereby indirectly affects hormone production. The aim of measuring testosterone level of the men during this campaign was to compare the testosterone level of the miners to the non miners so the men miners would be aware of the influence of the mercury for themselves ("Surviving the Toxic" by William R.Kellas). Blood samples have been collected and submitted for analysis by Puji Astuti, PhD., from the University of Gajah Mada (UGM), Yogyakarta. We are currently waiting for the result.

The result of the mercury levels in the fish has been published in Kalteng Post (a local newspaper), February, 26, 2007, to inform the community of the mercury hazards to themselves and their family. The result from the remaining research will be reported to the UNIDO and published in newspaper.

3.3 Implementation of Transportable Demonstration Unit (TDU)

Description of the Equipment

FNPF's technical team has fabricated three types of retorts: the pipe, Fauzi's, and kitchen bowl retorts in the manner described in GMP publications, in addition to learning from observation during TOT period.

The team also constructed amalgamation drum, but decided against introducing sluice box technology because it might promote mining activities in this area. Construction of fume hood was contracted to UD Sumber Baru, Kumai, using specifications from GMP publications.

Description of Implementation of TDU on Locations

Introduction of cleaner technology focused on two mining operations (Rasau and Aspai). In Rasau, FNPF worked with Mr. Haji Satri, the head of the *Dusun*, Mr. Antoni and Mr. Yatim. Mr. Antoni owns a small zircon/gold recovery operation employing four people. Mr. Haji Satri is a boss of about 15 groups of miners, each group employs 2- 5 people. In Aspai Sebrang, the team worked with Mr. Supian, who employs 9 groups of miners. At both locations, miners were eager to try using the introduced technology, primarily the retort, to recover mercury and save money.

Rasau

In March 2006, after returning from the first TOT, we gave a training session to the mining community in Rasau. In addition, we utilized our visit also to reach new people. The health training session was conducted in the house of *Kepala Dusun* (Head of Village), and attended by miners and their families.

At the end of October 2006, we launched another trip to Rasau and obtained opportunity for access to mining operations, to meet individual miners, and to explain the purpose of our wok to Mr. Haji Satri, Head of Village and some people from mining community. In November 2006, we used our visits to interview some miners and collect hair samples. In December 2006, with Mr. Antoni and about 20 other miners, we demonstrated the alternative technology to the miners at the house of the Head of Village. The demonstration was conducted together with the nurse from *Puskesmas*, who made a visit in regards to the outbreak of the Elephantiasis, which was a direct result of mosquitoes breeding in mining pit water. At this meeting we were able to talk with miners and their wives about alternative technology, including retorts, alternative amalgamation techniques, and how to clean mercury. In this session miners' wives, who often involve in the amalgamation process, reported numbness in their fingertips.

In December 2006, the team firstly met Mr. Antoni who set up amalgamation in his family bathing facility while the amalgam burning took place in the main room which functioned as kitchen and living area. We explained that the use of rubber gloves in amalgamation process was an inexpensive way to protect them, and also discussed the use of an amalgamation drum with them. We also demonstrated how to clean mercury using a 9 V battery and saltwater solution ob used dirty mercury owned by Mr. Antoni. He was impressed by the demonstration.

In mid December 2006, we returned to Rasau bringing the pipe retort and an amalgamation drum, made from a 5-gallon bucket, for Mr. Antoni to try. He carried the concentrated sand/gold mix, recovered at the day's end, to his house. Because the amount of concentrate was too small for the 5-gallon drum, so an impromptu amalgamation drum was made from a smaller, disposable plastic container found in his kitchen. We demonstrated the use of rubber gloves for protection while amalgamating. By watching the amalgamation process, we estimated that his house would have been highly mercury contaminated. The amalgam recovered amounted to less than a gram, which Mr. Antoni did not feel was a sufficient amount to try with the retort. We explained how to operate the retort and left the pipe retort with him to use after he had collected more amalgam.

The last visit to Rasau was made in February 2007 to ask Mr. Antoni how the pipe retort had worked. He had not used it as he felt it was too big for the small amounts of gold he was recovering and it took too long to burn. However, he was excited to try Fauzi retort. As he only had a very small amalgam at that time, so we left Fauzi retort to try later when they got more amalgam. He did not use the amalgamation drum, but he had been using rubber gloves in the amalgamation process as well as the 9-volt battery/saline solution to clean the mercury. He had become aware of the danger of mercury hazard and it encouraged him to adopt technology that can reduce the exposure.

About a week after we left the Fauzi retort with Mr. Antoni, Mr. Yatim came to our office in Kumai and reported his experiences in using the Fauzi retort. He had burnt 2.5 gram of amalgam and could capture about 4 drops of mercury (~ 0.5 grams). In another experiment, he captured 4 drops of mercury from 7 grams of amalgam. He could not tell how long the burning process took time, but he assumed about 1 hour. Other miners who watched the experiment were interested to try , but they did not proceed because the amalgam was too small. They were reluctant to collect all amalgam together to avoid cheating each other.

Aspai Sebrang

Aspai Sebrang is the primary site for gold extraction. FNPF launched the first visit to this site in early November 2006 for assessment, initial contact with miners, and explanation of the purpose of our campaign. Miners in this area was known as difficult to approach, but from our conversation with speedboat drivers and miners in Aspai, we found out Mr. Supian as the key person for the small scale mining. Then we visited his house in Kumai to explain the purpose of our campaign, health problems associated with mercury exposure, and the benefit of using retort. He expressed his interest in trying the retort and gladly invited us to give a talk to his mining crew. We conducted a training session for miners in Mr. Supian's site on November 23, 2006, that covered helath hazard of mercury exposure and alternative technology. Participants expressed a great interest in receiving the information and trying the alternative technology, and even Mr. Supian was interested to purchase one Fauzi retort.

In January 2007, we returned to Aspai to bring Fauzi retort for Mr. Supian. We arrived late in the afternoon, when the carpets were just finished being cleaned. There were about 20 people, men and women, gathered to watch the retort demonstration. We were able to wacth amalgamation techniques, which were done in the pond where the mining operation was located. This operation was in very close proximity (less than 200 meters) to an encampment where there were several "warung" (small restaurants) and accommodations for mining families. People used the amalgamation pond also for bathing, brushing teeth, etc. We gave rubber gloves to a miner who used bare hands to mix the concentrate and he was willing to use them. To clean the mercury, miners used bleach and we introduced the Pantoja method. In the end, they got 1.5 of amalgam which would be processed further using Fauzi retort and kerosene stove provided by Mr. Supian. However, after approximately 0.5 hour of burning, we could not see mercury precipitated in the water. After the retort cooled down, we opened the retort to find out there was no change in the amalgam. Then, Mr. Supian took the amalgam to the communal torch site not far from his residence as the owner of the amalgam expected fast cash. It took only 5 minutes of burning there. The second test using 2 grams of amalgam also did not work out after 45 minutes of burning. Some mercury evaporated and sticked to the cover of the retort. So, we promised the group to find out the problem and return with more information.

Gold Shops in Pangkalan Bun

FNPF visited and conducted survey to the gold shops in Pangkalan Bun to assess number of gold shops which did amalgam burning process and their location. We observed that the burning process took place in two shops, while the other shops admitted that they only sold and

produced jewelry. During their visits, FNPF's technical team was able to talk with shop owners about the danger of amalgam burning.

3.4 Campaign

Prior to the FNPF awareness campaign, FNPF gathered information and found out that mining communities had no knowledge as to the health risks and effects of mercury, nor of the potential for fish caught in local waters with high concentration of methyl mercury and not safe for consumption. They did not know there were retorts and amalgamation drum that could help to save money, to reduce mercury exposure, and to reduce the amount of mercury discharged into the environment.

The team set the targets for the campaign, which included miners, wives, school children, government offices, and general public. To reach those targets, we have used some approaches as follow :

- Campaign by mass media : radio and newspaper;
- Brochures, posters and booklets
- Direct interaction by conducting visits to local schools in Kumai and Pangkalan Bun, gold shops, mining sites in Rasau and Aspai with TDU, government offices;
- Developing curriculum for schools

Brochures, Posters and Booklet

Fact sheets on the risk of mercury exposure and mercury/methyl mercury contamination have been created to convey pertinent information. Fact sheets were available in Indonesian and some in English. The brochures were developed based on the information received during TOT. The given information included risks of prolonged skin exposure with mercury; fume exposure especially to pregnant women and detrimental effects on neurological development of fetus, and small children; and effects of methyl mercury contamination from consumption of contaminated fish and other organisms.

Radio Broadscast

We have made contract with "Primadona", a local radio station, to disseminate several topics of information using interactive talk show, including health effect of mercury, alternative technology, diseases associated to mining activities (Malaria, Filariasis/Elephantiasis, Tuberculosis and HIV/AIDS). We collaborated with other institutions to be the resource persons, i.e. Dr. Untung Suropati from Puskesmas for Malaria dan Filiarisis and drg.Indrawan MS from

Health Department for HIV/AIDS. Resource person for health effect of mercury and alternative technology were from.FNPF. This broadcast reached listeners in Rasau and Aspai, and served as an effective method to increase awareness on the use of alternative technology and health issues.

Newspaper

Newspapers were also considered as an important approach to reach the general community and the government officers, since some important information could be disseminated widely. An article that contains information about the gold mining process and the effect of the mercury on the environment, including the result of the mercury level in the fish samples from Sekonyer River, was submitted by FNPF and published in Kalteng Pos (Central Kalimantan provincial newspaper), on February 26, 2007. The published article could be read online on the Kalteng Post Online, on the www.kaltengpos.com/berita/index.asp?Berita=Opini&id=20679

Visits to Local Schools

FNPF launched visits to local schools where many of miners' children attended. These children were expected to share the information they received with their families at home. Because of the possible high levels of mercury and methyl mercury in the local watershed, awareness of the detrimental human and environmental effects must be part of the children education, as they will have to deal with the contamination issues for many years, or generations. Education of the children, relating to these issues, will lead to informed decision making in the future. To convey the messages, we used puppet show in elementary schools and presentation in high schools.

Visits to Gold Shops

During assessment visits to gold shops, the technical team relayed information regarding the dangers of mercury and the use of clean technology. We had hoped to have further cooperation from the one gold shop owner who had made a hood retort. One of the two gold shops the team visited was already aware of problems from mercury exposure. He is from a generational gold business family and has learned that his father and other relatives are having health problems, which were diagnosed by doctors in Singapore to be a result of mercury inhalation. He has been experimenting on hood/chimney retorts for five years and has constructed his own hood retort, which has shown good results for mercury recovery. Unfortunately, as the time went by, we were not able to see the retort because he could not make time to meet with the team. However, he has volunteered to help us in the campaign. He is willing to tell the miners

who sell their gold to him about the affects of mercury exposure and the importance of using a retort.

Visit to the Government Offices

FNPF encouraged Local Government Agencies and Officials to join forces in raising community awareness towards the health effects of mercury exposure and the introduction of cleaner technology for gold processing. We hope that the government agencies would take a stronger role in the governance of small-scale mining.

At the beginning of the campaign FNPF had visited the Tanjung Puting National Park Authority office and talked to the Head of the Section, Mr.Saut Manalu, about the campaign program which would be started in September. He was supportive and several visits afterward were made, to arrange a meeting in the park office and to distribute booklet and brochures. The Park Authority expressed a str ong interest in the campaign and the Head of the Park Authority Mr. Bambang Darmaatmaja, also supported the campaign by allowing us to use the office for meetings/training for other government officers at the end of November. We held a health training and demonstrated the use of clean technology to reduce mercury/methyl mercury. The pipe and salad bowl retorts were shown as well as the hood retort we had fabricated. Explanations were made of the amalgamation process and methodology to reduce mercury exposure.

The Health Department has given us good support in the campaign by sending the local nurse to assist us in the field when needed during the campaign. Our team has been working closely together with the local nurse in Sekonyer, Rasau and Aspai. The local people have a high degree of respect for medical personnel.

The Health Department has given us the information of the current health issue of Elephantiasis that is happening in Kumai. Eight people were detected positive infected by the disease in Bedaun village. The Elephantiasis was caused by mosquito bite, and mining ponds make a big contribution in producing mosquitoes. This means another serious problem, with painful and potentially deadly consequences, threatens the mining community. This information has led us to an important step in developing and updating our campaign. We cooperated with a doctor from the local Health Clinic to give talk about mercury and Elephantiasis on the Radio Broadcast in December 2006.

FNPF has developed a good cooperation with the Fisheries Department through *Pusat Pelelangan Ikan* (Fish Auction Place) in Kumai. We visited the office in Kumai several times, and in early February 2007, a meeting was being held for area fishermen to present the campaign,

health hazard of mercury and alternative technology that could be applied to reduce mercury contamination.

The Office of Environmental Impact Management (*Bapedalda*) has shown an interest in our campaign and have asked us if we could join them in giving a presentation to another mining site outside Pangkalan Bun, called Pangkut, for their program next year. According to their information this area is bigger than the Aspai mining area, and through *Bapedalda*, the Local Government has distributed some Fauzi retorts to miners at that site (Pangkut). However miners did not use the Fauzi retorts because they think it is not important to prevent the mercury exposure. *Bapedalda* has never given a clear and complete training to miners like what FNPF has provided during the meeting, while this would be influential to raise people's awareness on the effect of the mercury

4. PROJECT EVALUATION

4.1. Publication Distributed

By the end of November 2006, a total of 4,750 brochures, 50 booklets, and 25 posters were printed in bahasa Indonesia and distributed to target audiences. In addition, FNPF also printed 250 brochures in English, which 100 of them were already distributed to the Tanjung Putting National Park visitors, and 1 banner. Posters were distributed to schools and government offices (*Balai Taman Nasional*, District Health Department, Community Health Centre, Fisheries Department – Pangkalan Bun and to the Head of the Dusun Rasau). 50 booklets from UNIDO office have been distributed to the participants of the meeting in the Park Office in November, andmining bosses in Rasau, Aspai and Aspai Sebrang.

4.2. People Consulted and Advised

- During this campaign we had trained 3 other personnel who were involved in this project directly, 2 other FNPF staff who worked voluntarily (Juliarta and Nyoman Antoni), and 8 students from the Heal Green Conservation Club. They were involved in this campaign through gold shops survey and through drama plays in the meeting with the Local Government officers in Balai Taman Nasional Tanjung Puting, on November 29, 2006. In addition, training was also given to 15 Government Officials (7 people from the National Park Authority, 3 people from Health Department, 1 person from Office of Environmental Impact Management, and 2 doctors from *Puskesmas* Kumai).
- Health awareness consultancy and advisory to 71 miners, 52 miners' families in Rasau and Aspai mining sites and Sekonyer River village, 1 Parliament member, and 17

fishermen from Kumai. Having received information on the health hazard of mercury and the result from fish analysis, the fishermen intended to submit a protest to the Government as this fact would affect their income. In addition, we also targeted 42 people from non-mining community in Rasau, Aspai and Sekonyer River Village.

- Technological improvement were consulted with 7 gold shop owners.
- Consultancy with Bupati Kota Waringin Barat, Mr. Ujang Iskandar, who were surprised that there are still gold mining activities along Sekonyer River. He requested FNPF to expose this issue.
- Training to NGOs which involved representatives from Orangutan Foundation International and Dian Tama Foundation. Dian Tama Foundation is a community based organization with office in Pontianak, and expected UNIDO or FNPF to conduct training in Pontianak.
- Awareness raising to 583 students.
- Based on the observation of FNPF's health team, Mr. Yatim and Mr. Antoni has shared knowledge given by FNPF to 8 other miners. Mr. Yatim has built and experimented with salad bowl retort which proven worked well. Unfortunately, before making any documentation on the retort, it was stolen by another miner who had interest in it.

FNPF conducted a survey during the campaign in the visits that indicated increase of knowledge/awareness/ education of the health effects of mercury/methyl mercury and the technology available to reduce mercury exposure and pollution. From 20 villagers and staff that have been surveyed, it shows a 50.6 % increase of the awareness level; whilst from 39 students it has shown a 38,7 % increase. Ten percent of the villagers were women and the rest were men, and percentage of the students was about equal between girls and boys.

5. CHALLENGES

- In October 2006, Tanjung Puting experienced the worst forest fires in the park's history. All members of staff were needed to work in fire management to protect the park's Tanjung Harapan post, FNPF reforestation sites and nurseries, and to reduce the number of hectares of forest destroyed and critical orangutan habitat lost. Fires burned from October 2nd through November 9th, when seasonal rains finally returned. Campaign activities were ceased as all personnel were in cooperation working for this force majeur.
- As a small NGO with a tight budget, FNPF depended on payment from UNIDO to run the campaign and any lateness in payment will cause delay in implementation. The campaign slowed down at the end of year 2006 as Assistant to Country Focal Point's

misunderstood the contract. This has caused delay on submission of the First Report and the second payment from UNIDO HQ as a result.

- FNPF team to did not see the complete demonstration of Fauzi retort in TOT in Rungan Sari. Without knowledge on the actual equipment operation, it was difficult for the technology team to demonstrate how it works to the target audiences.
- The poor quality of fume hood drawing; and unavailability of real example, specification, details of operation and from UNIDO affected the equipment construction.
- The campaign has slowed down in September and October 2006 as miners and community, who are predominantly Moslem, celebrated Ramadan and *Lebaran*.
- The remote condition of the mining sites has caused expensive transportation cost to the larger towns, including getting health support and education. Miners need to get fast cash which they could obtain by burning amalgam using torch.

6. RECOMMENDATIONS

- UNIDO/GMP training should include actual use of the technology. Retort use should include information on optimum weight of gold burned and temperatures at which burning should be done (high heat or low heat). Considerable work needs to be made on the design of the hood retort before it is included in the GMP handbook. In a campaign such as ours, which received relatively small funding, the price of equipment manufacturing would have been used better making trips to the mining communities. We would also recommend that additional techniques be added to trainings that involve mercury free gold processing. In situation where every day gold recovery is relatively small, and retorts is ineffective, other techniques might be applicable.
- The inclusion of community development will help miners develop a cooperative system for amalgamating areas and burning stations. The nature of gold creates an air of secrecy. The primitiveness of mining communities makes it difficult to organize miners to work cooperatively, although we feel it is possible over time.
- More time is definitely necessary to create effective change. The communities of Rasau and Aspai take one and half an hour to reach by speedboat. While we made definite progress through our campaign, more intensive and continuous contacts needs to be made with the communities. This campaign we found very important and we feel the miners are very interested in changing practices.
- We have been contacted by Yayasan Dian Tama from West Kalimantan and several other organizations that also have problems with gold mining using mercury in their local area.

All have asked for information as how they can also get involved with UNIDO/GMP. We have given contact information for the UNIDO office in Jakarta, but also include that we do not know of the availability of funding to start a similar program. It is evident that this is a large enough problem in Kalimantan that it should warrant funding through *international organizations.*

- We have learned a lot through our campaign, there are still issues we need to improve, but our knowledge should have an avenue through which we can begin to visit/network with other communities/non-profits organizations, who are requesting our help. It is our recommendation that the campaigns/teams involved in the UNIDO/GMP work be further developed and funding set up for them to start outreach program with other communities.

APPENDICES

1. List of Brochures Recipients

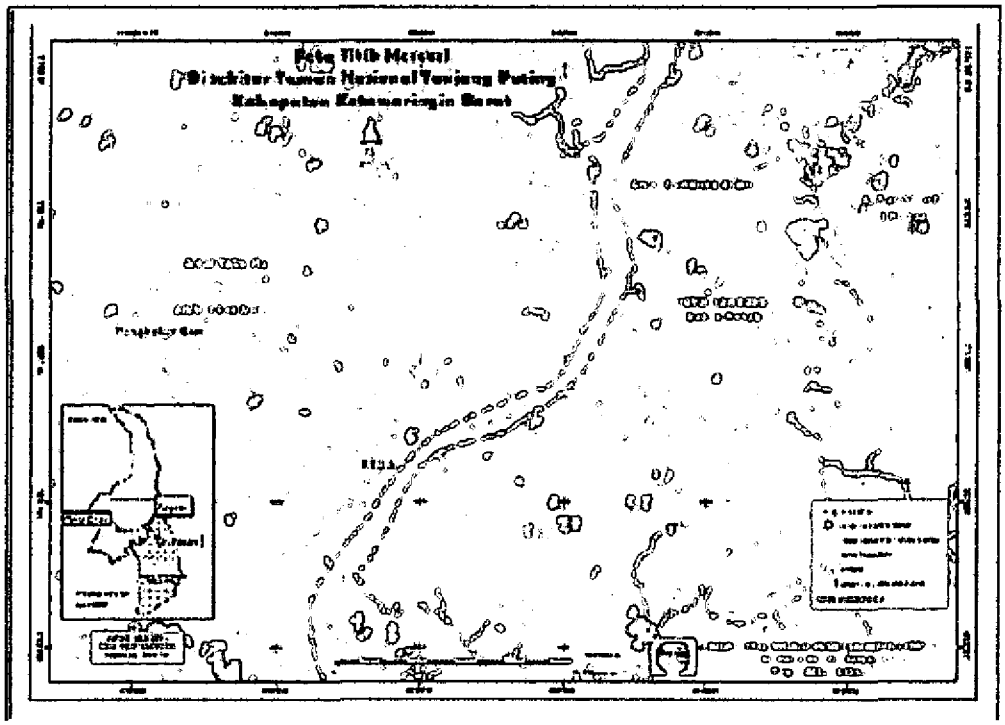
No	Recipient	Quantity	Remarks
1	Rasau and Aspai mining sites	750 brochures	
2	Sekonyer River Village and Tanjung Harapan Post of National Park Office	250 brochures	
3	Park Authority Office	150 brochures	
4	Fish Auction Place	200 brochures	
5	Fisheries Department	350 brochures	
6	Primadona Radio	50 brochures	
7	Environmental Impact Management Office/ Bapedalda	300 brochures	
8	Health Department	300 brochures	
9	Puskemas (Community Health Center) – Kumai	200 brochures	
10	Miners who sold amalgam to Mr. Martin	300 brochures	Distribution via Mr. Martin
11	Schools	1,300brochures	13 schools @ 100 per school
12	Visitors of FNPF office – Kumai	250 brochures	

2. List of Targeted Schools for Health Awareness Campaign

No	Date	School	Total Students	Number of Class	Age y.o.
1	9/20/2006	SMAN -2.P.BUN	41	1	16- 18
2	9/20/2006	SMAN-2.P.BUN	29	1	16- 18
3	10/8/2006	SDN-1.SEKONYER	20	3	10-13
4	11/25/2006	SMAN 1 KUMAI	39	1	16-18
5	11/27/2006	SDN 1 BEDAUN	61	2	10-13
6	11/28/2006	SMAN-1.P.BUN	30	1	16- 18
7	12/21/2006	SMKN 1.P.BUN	58	1	16-18
8	12/22/2006	SMAN 3.P.BUN	26	1	16- 18
9	12/30/2006	SMKN 2.P.PANJANG	41	1	16- 18
10	1/24/2007	SDN 1.SIDOREJO	63	2	10-13
11	1/30/2007	SMPN 1. KUMAI	39	1	13-15
12	2/13/2007	SDN 2 MENDAWAI	66	2	10-13
13	2/16/2006	SDN 1. CANDI	70	2	10-13
Total			583	19	10–18

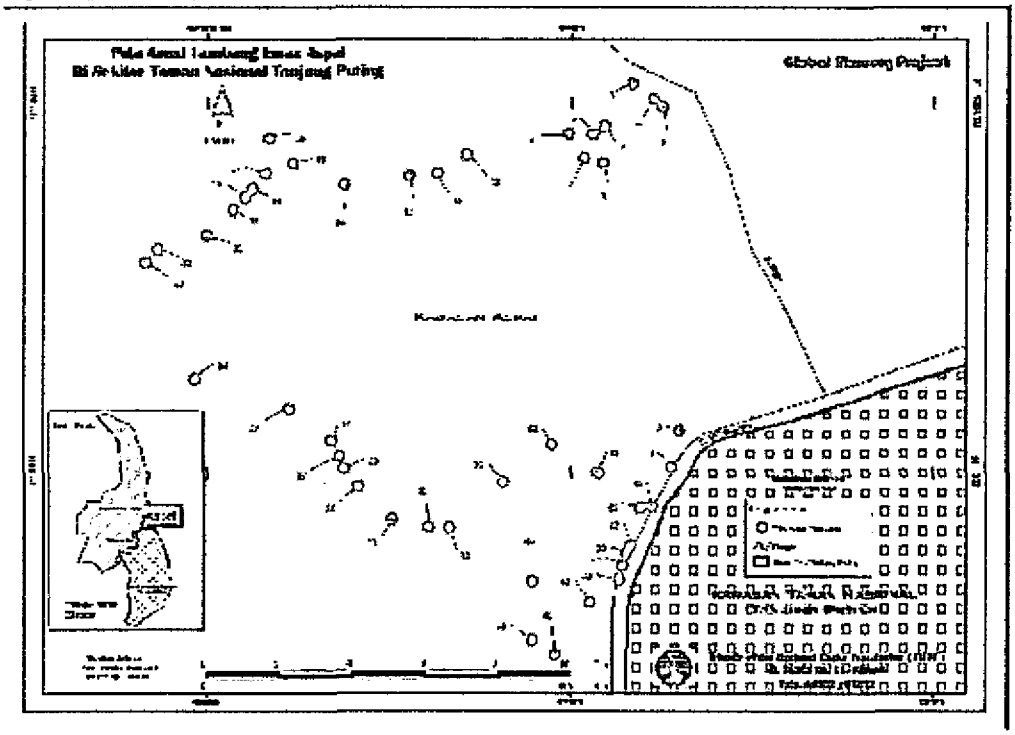
Appendix 3. Map

Map1. Aspai and Rasau mining sites on the Sekonyer River, and gold shop locations in Pangkalan Bun.



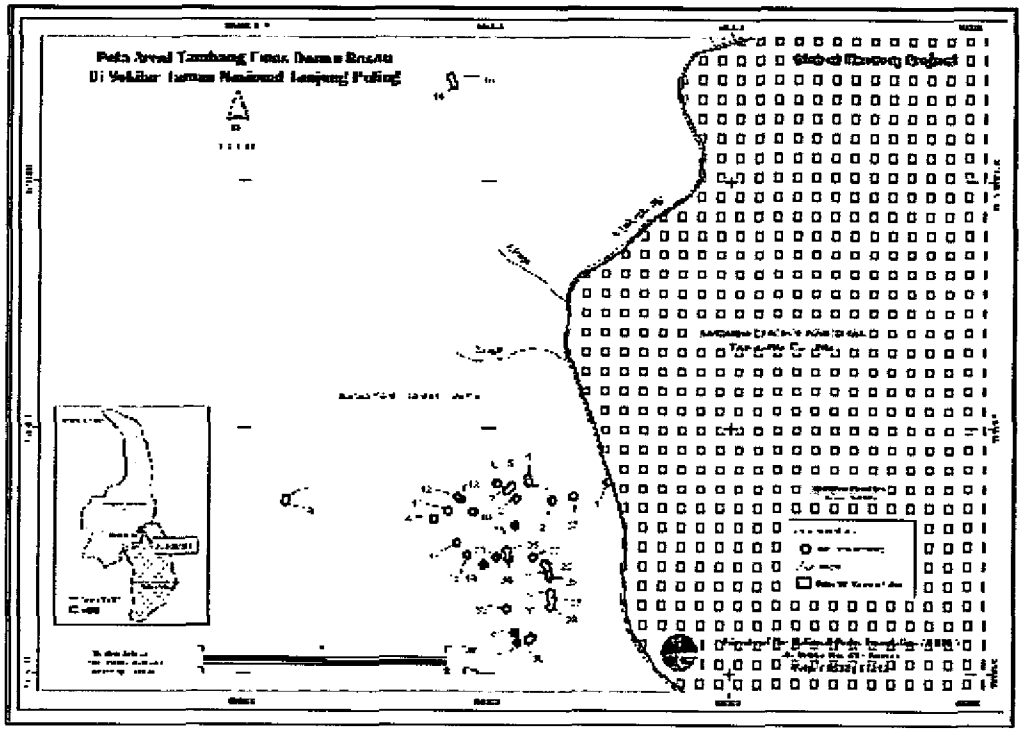
Kumai River is the large body of water in the center of the map. The turquoise point on the left side of the map is Pangkalan Bun. The top right side shows the locations of the Rasau and Aspai mining sites on the Sekonyer River. The blue area is the Aspai mining site, and the yellow area is Rasau mining site, and Tanjung Putting National Park is on the east side of the Sekonyer River.

Map2. *Aspai mining site*



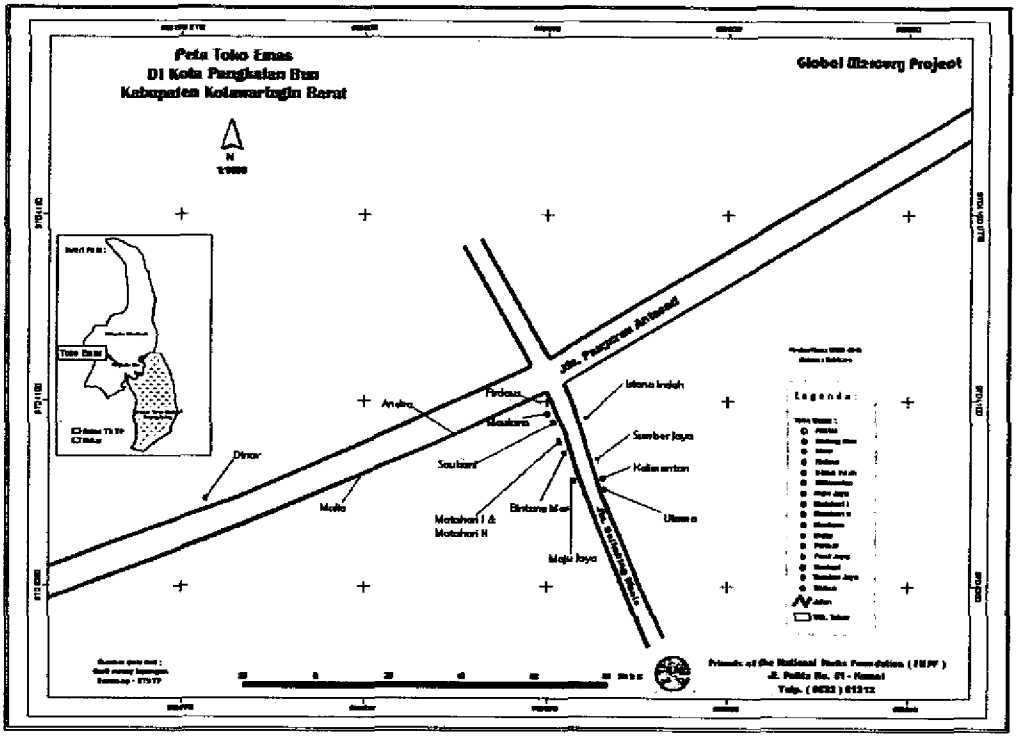
The left side in the map is the Aspai mining area. The mining sites are pinpointed in purple. The green area on the lower right is Tanjung Putting National Park, with the Sekonyer River separating the two areas.

Map3. *Rasau mining site*



The left side in the map is the Rasau mining area. The mining sites are pinpointed in purple. The green area on the lower right is Tanjung Putting National Park, with the Sekonyer River separating the two areas.

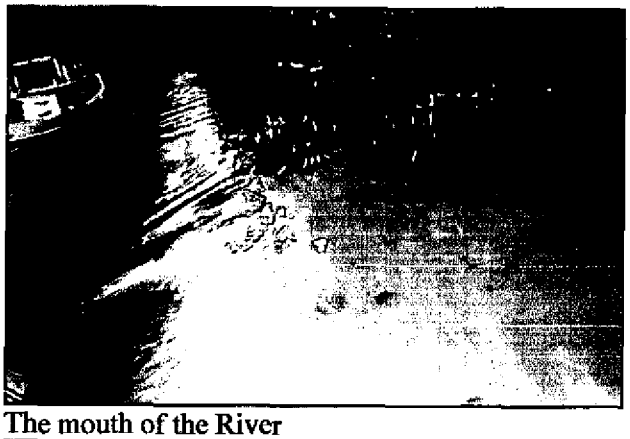
Map4. Gold Shops in Pangkalan Bun



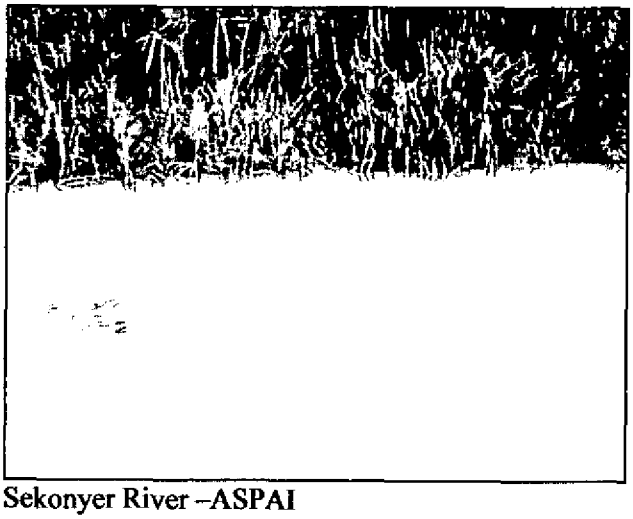
Map5. *Fish Sampling Location*

The Red mark is the location of the fish sampling from Sekonyer River, the bottom mark is in front of the village and the post of the National Park, and the second mark is in front of Aspai.

SEKONYER RIVER



The mouth of the River



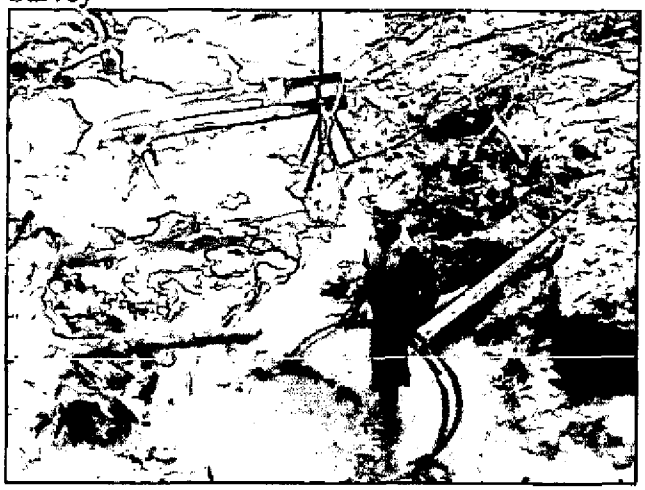
Sekonyer River –ASPAI

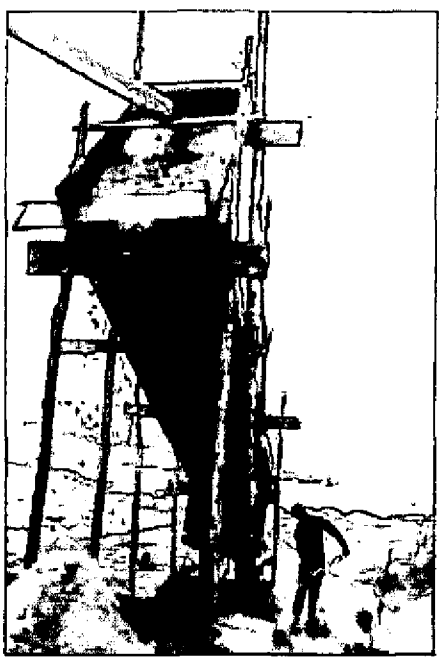
TOT in Palangka Raya
TOT 1

TOT 2

RASAU mining site

Survey





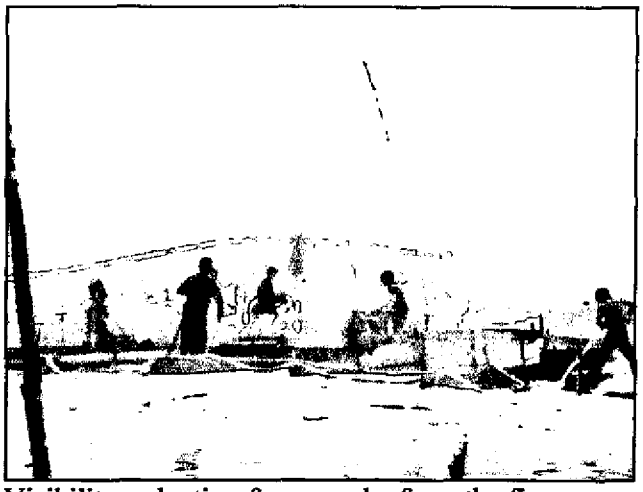
Moch. Kasri taking points for GPS Recording

Interview

Women miner

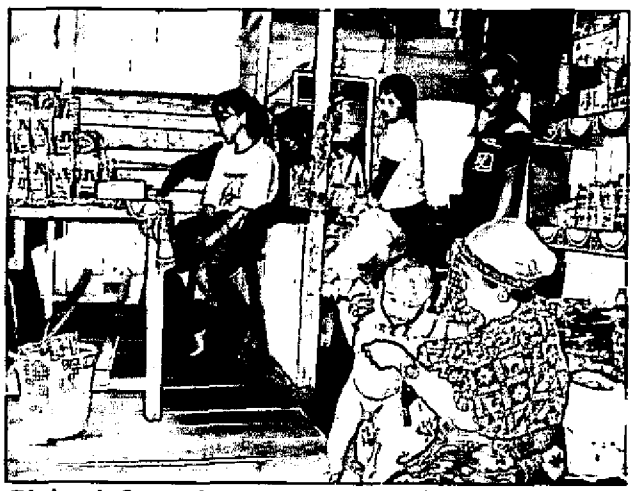
Interview and distributing brochures

Hair sampling



Visibility reduction from smoke from the fires

Trip to Rasau



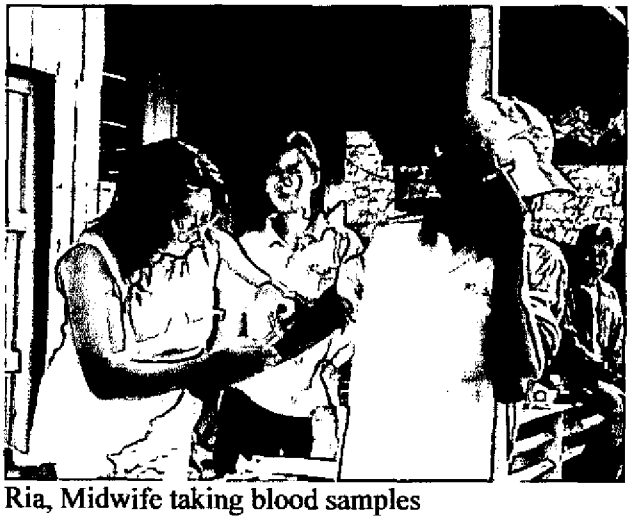
Giving information to Mr.Haji Satri's family(miner)

Training in Rasau

Health Session and Interview

Ainun Interviews miner's family

Drh. Yenny Interviews Pak Antoni (miner)



Ria, Midwife taking blood samples

Technology Alternative Demonstration

Mary K. Howe showing how to clean mercury

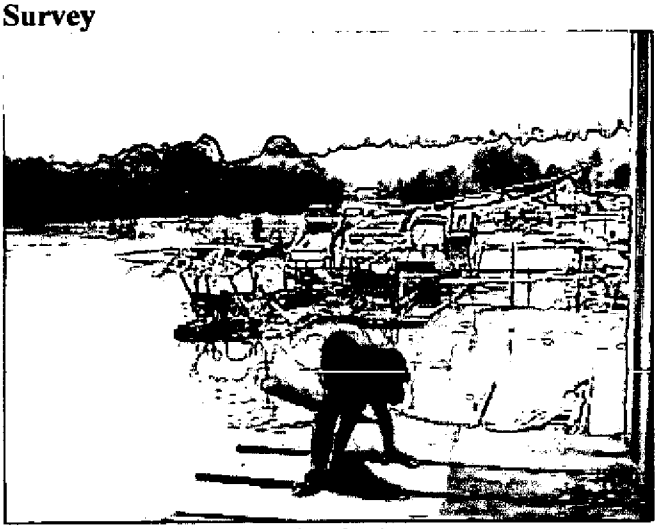
Amalgamation

Showing Retort

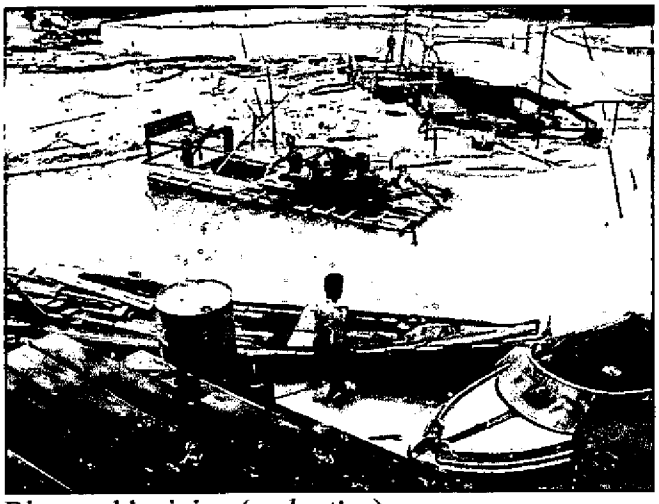
Miner train another miner

ASPAI mining site

Survey



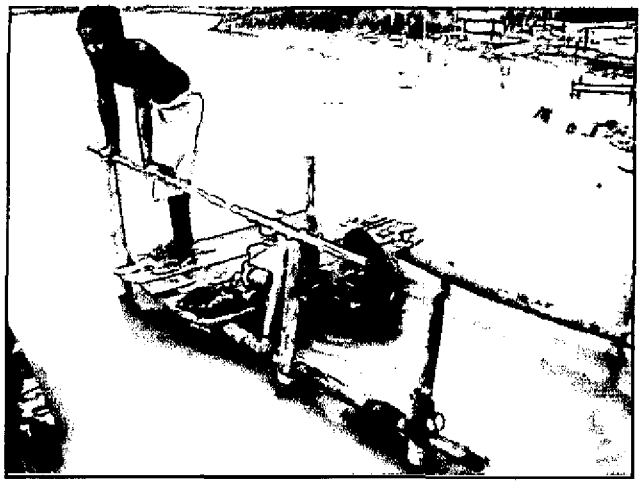
Mining in the river (melanting)



River gold mining (*melanting*)

Land mining

Zircon mining

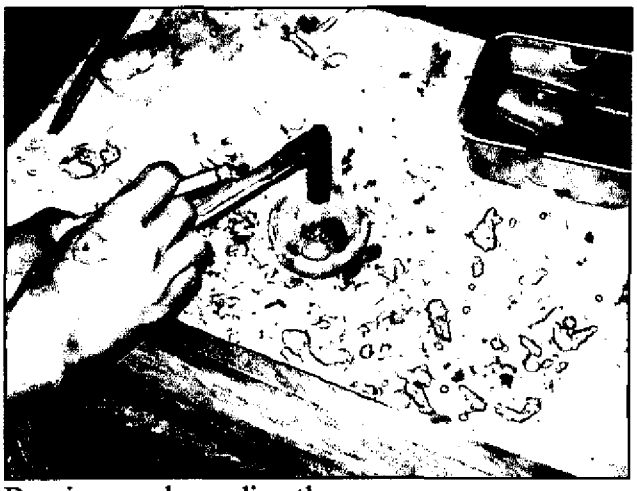


Children wash and play in the amalgamation pond

Trip to Aspai

People are watching amalgamation burning at a food store

Interview



Burning amalgam directly

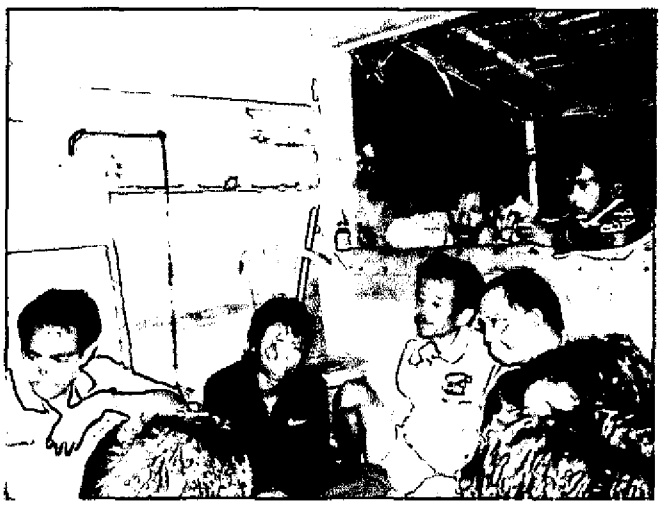
Hair Sampling

Blood Sampling

Distributing brochures

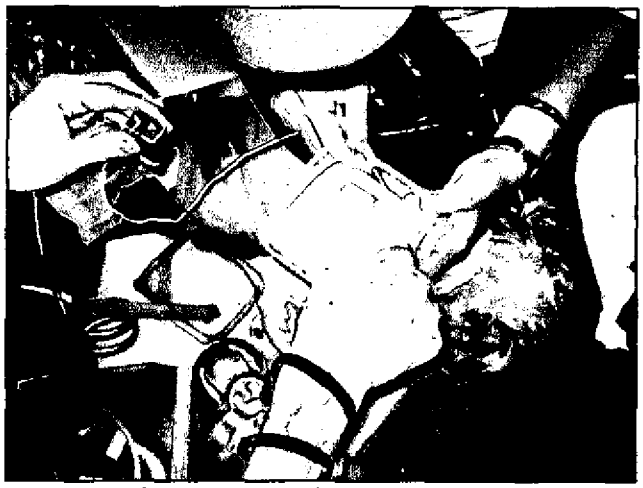
Health Session Training

Drh. Yenny in front of the miners in Aspai Sebrang

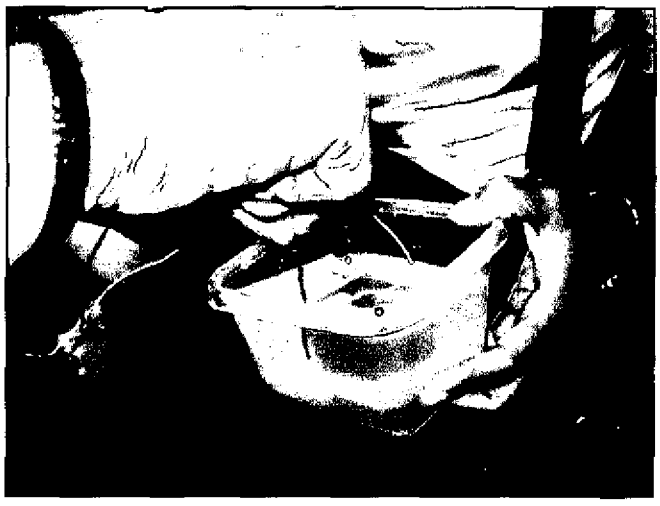


Technology Alternative Training

Salad Bowl Retort



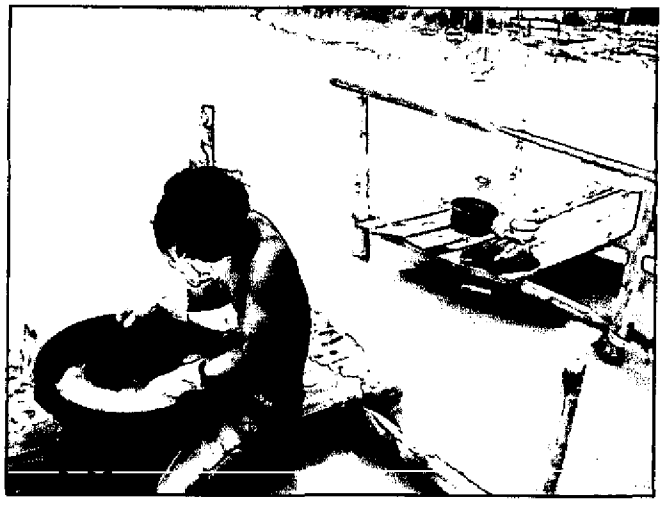
Mercury Cleaning using battery 9volt and salt

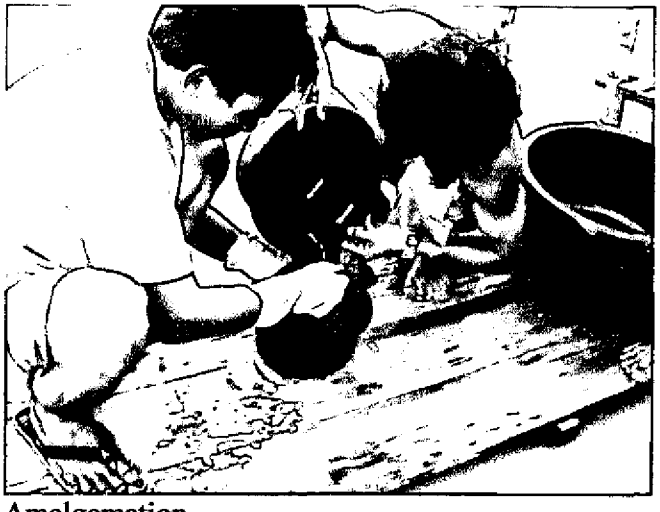


Mr. Supian tries the rubber hand gloves from FNPF

Hand a pair of hand gloves to a miner.

Mr. Supian 's employee wears the hand gloves



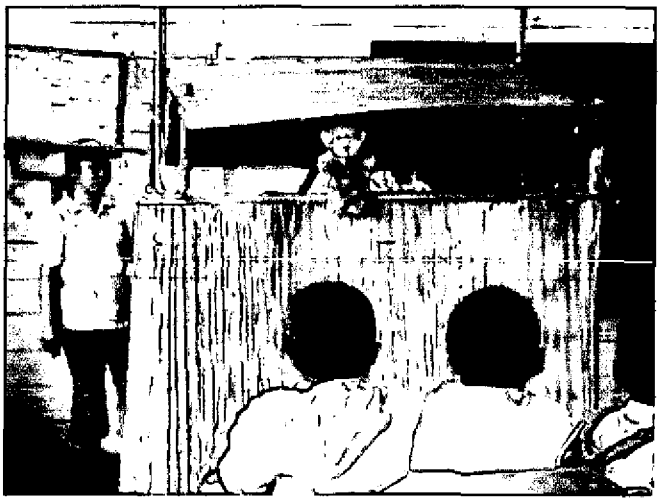


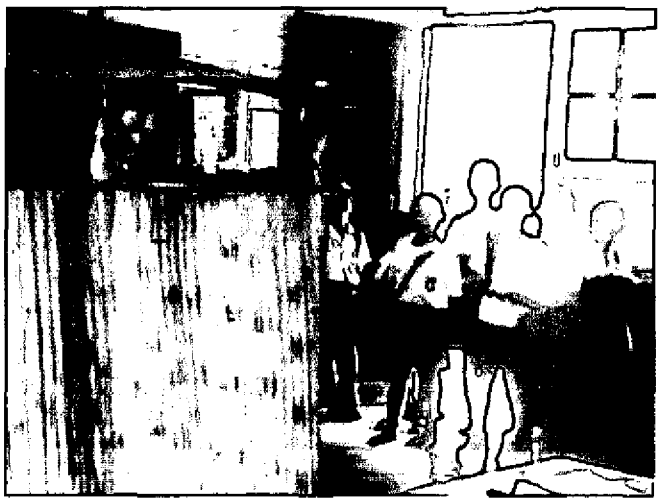
Amalgamation

Trying Fauzi Retort

SCHOOLS TRAININGS :

1. Sekonyer Village School (SDN-1 Sekonyer)





2. Bedaun Village Elementary School (SDN-1 Bedaun)

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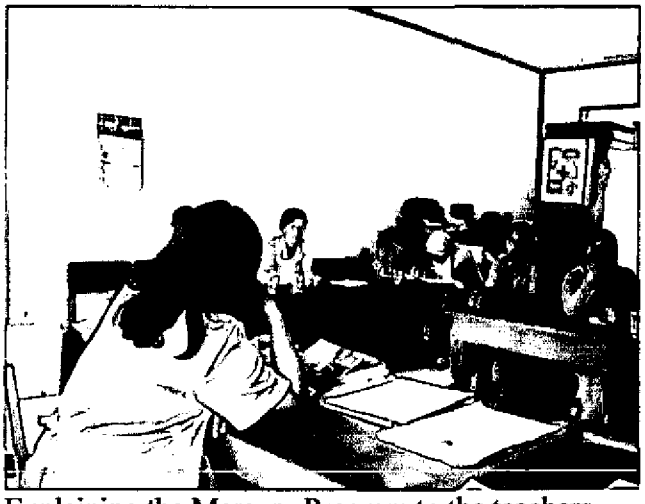
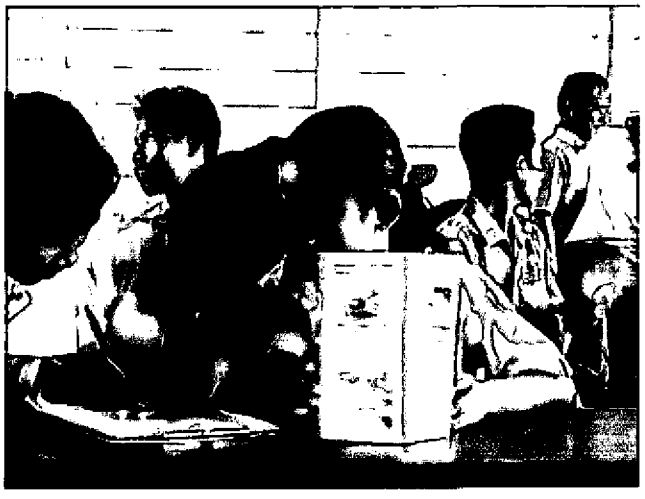


Explaining the Mercury Program to the teachers



Trip to Bedaun village

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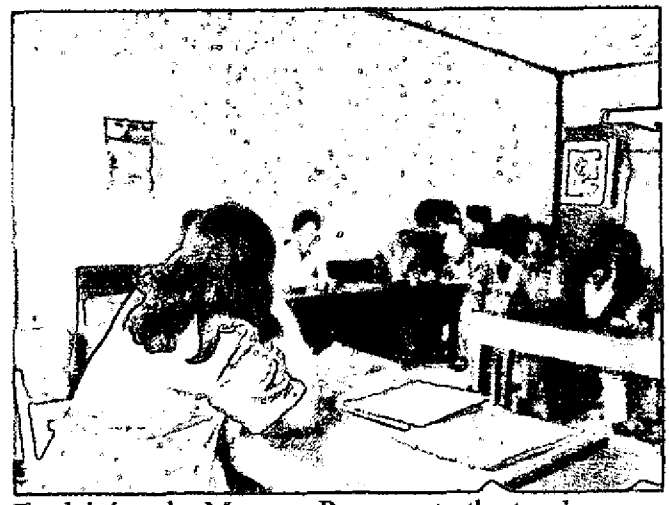
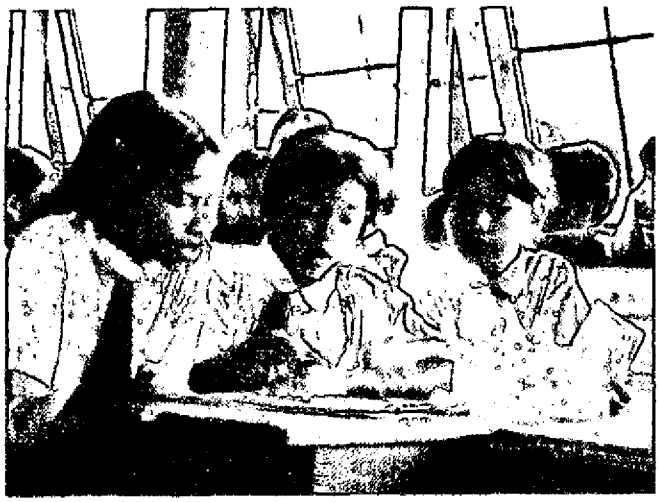
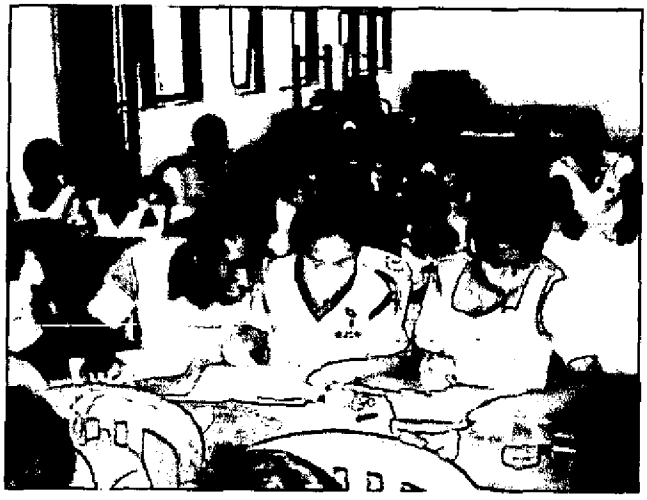


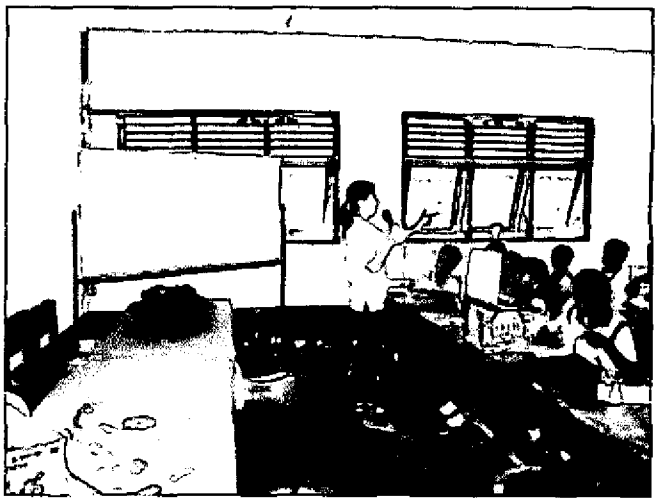
Explaining the Mercury Program to the teachers

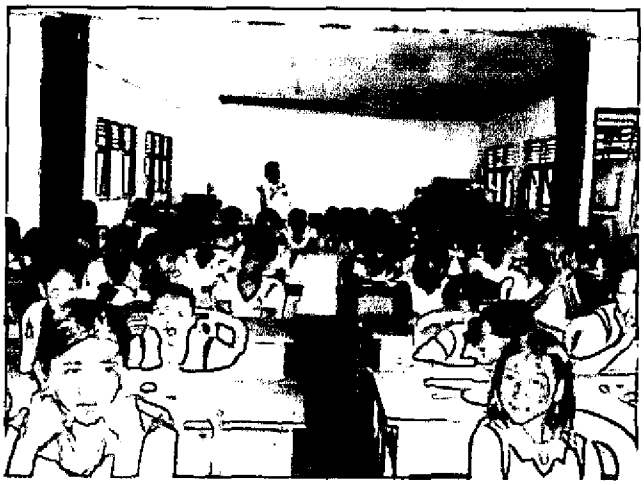


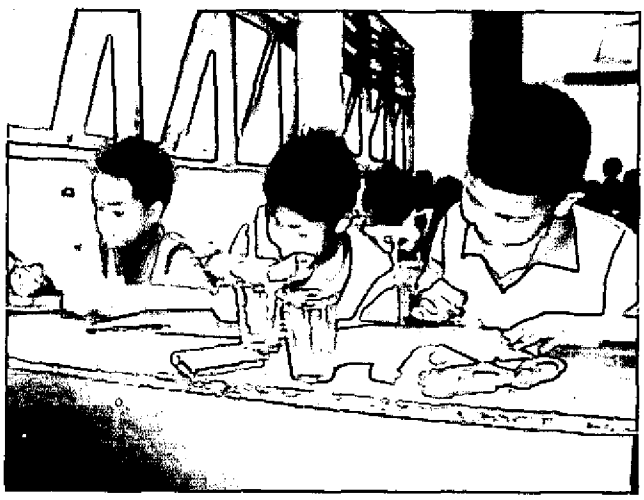
Trip to Bedaun village

3. Candi 1 Elementary School KUMAI
(SDN-1 Candi)

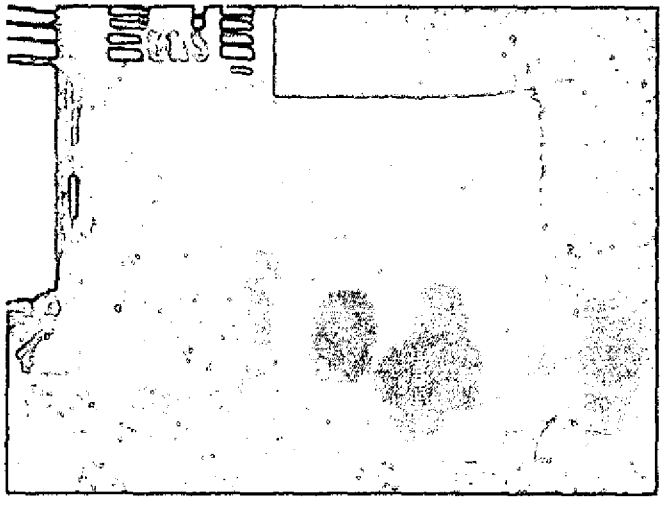


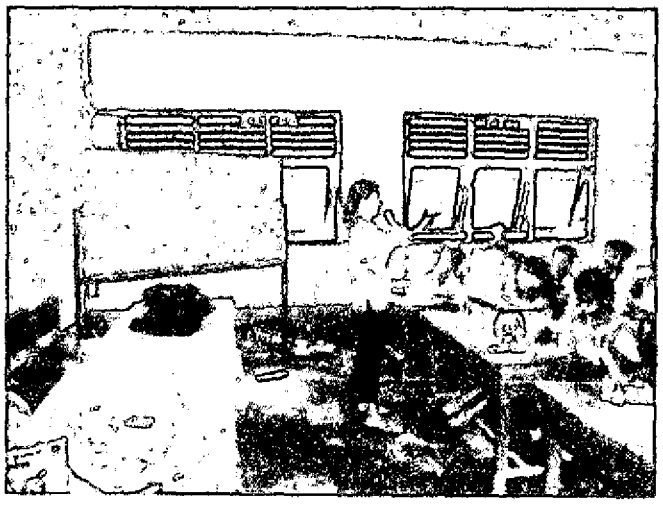


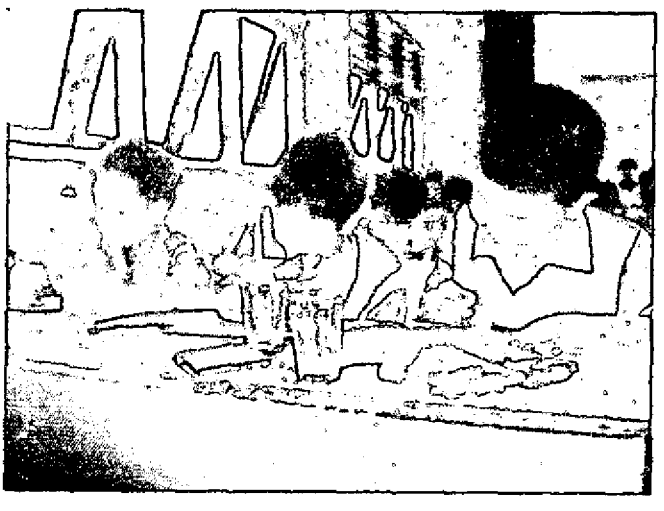




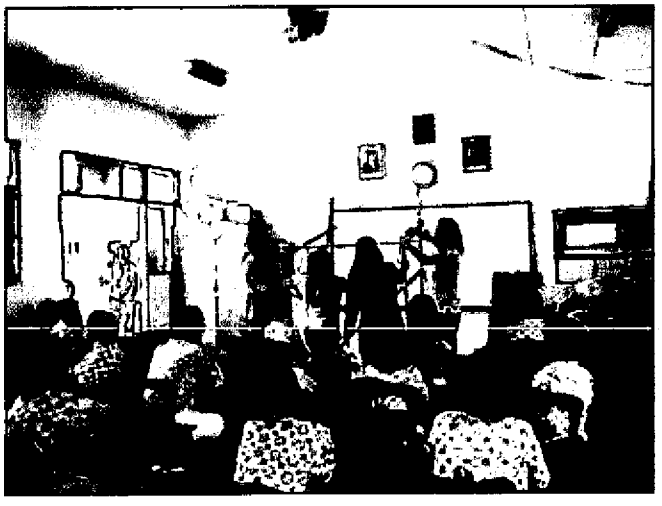
3. Candi 1 Elementary School KUMAI
(SDN-1 Candi)





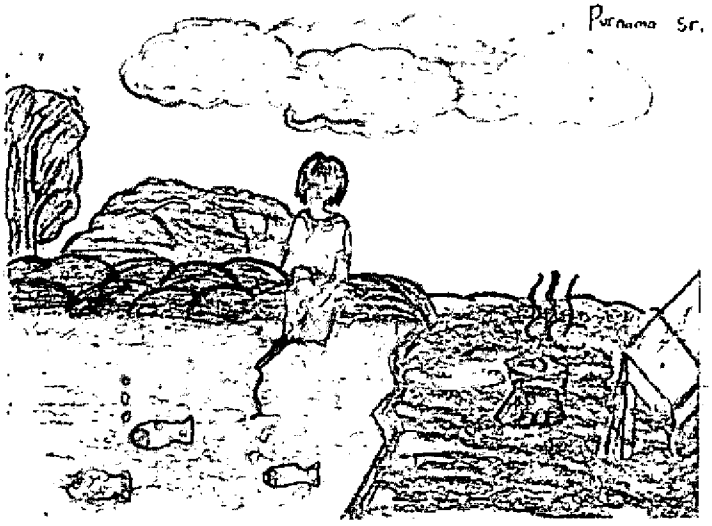


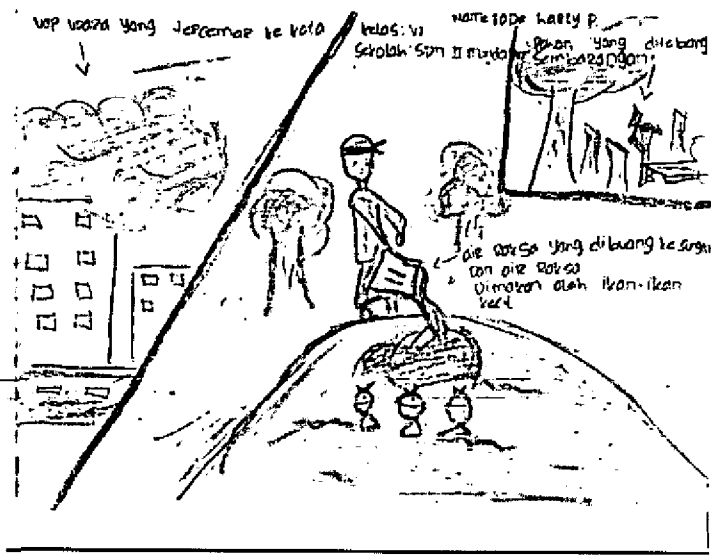
4. Mendawai 2 Elementary School
PANGKALAN BUN(SDN-2 Mendawai)

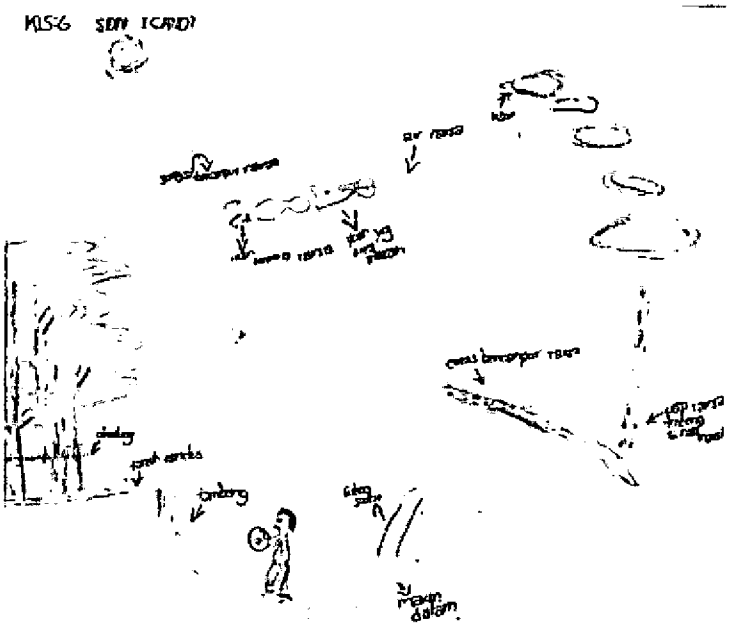


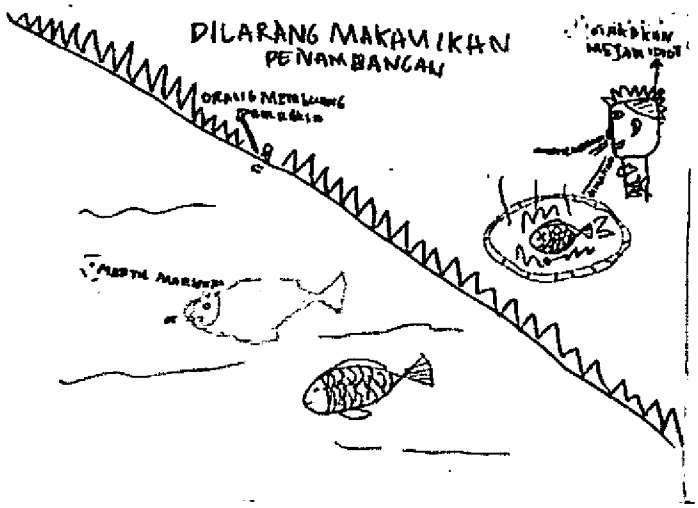
The students drawing picture

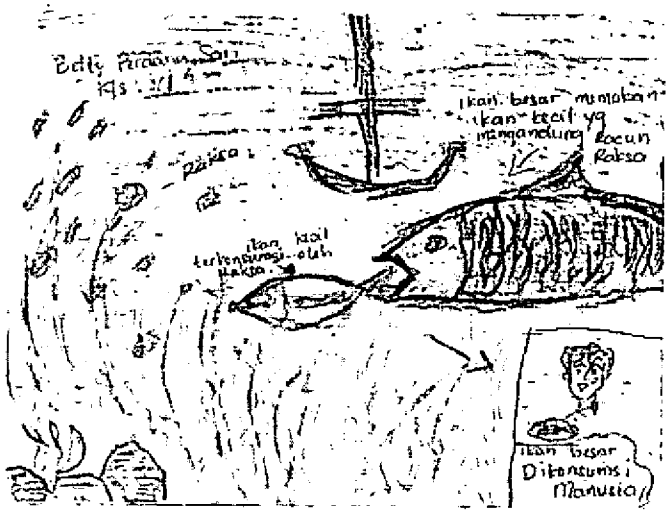
Students' drawing



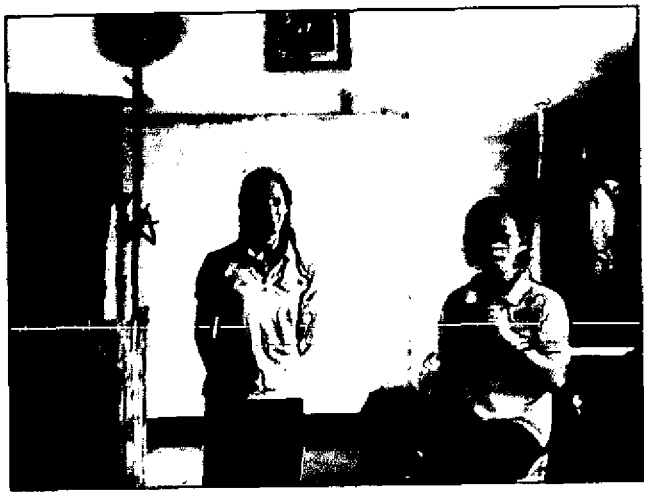


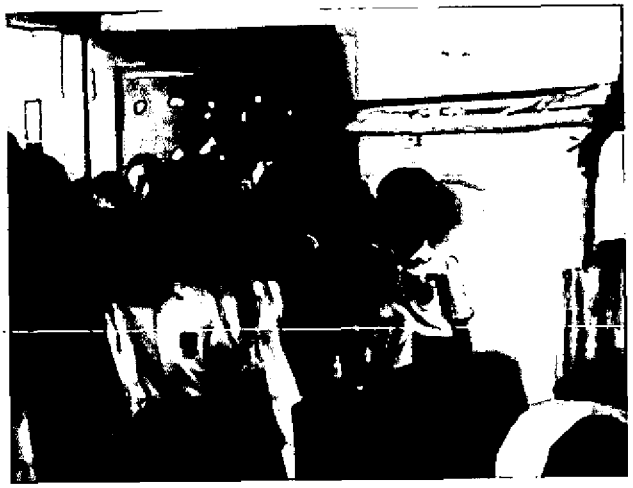


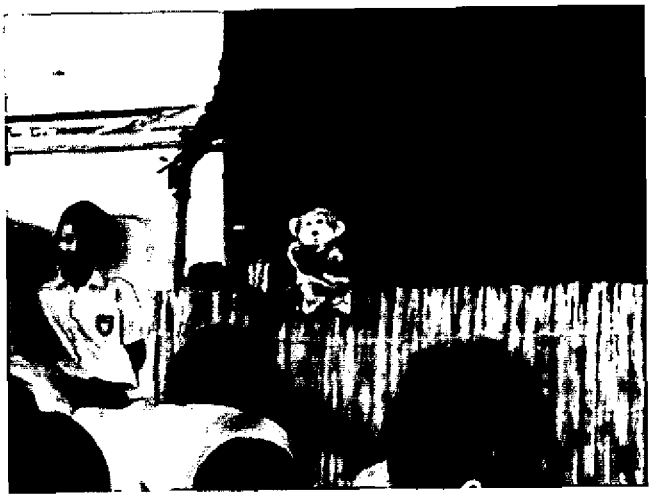


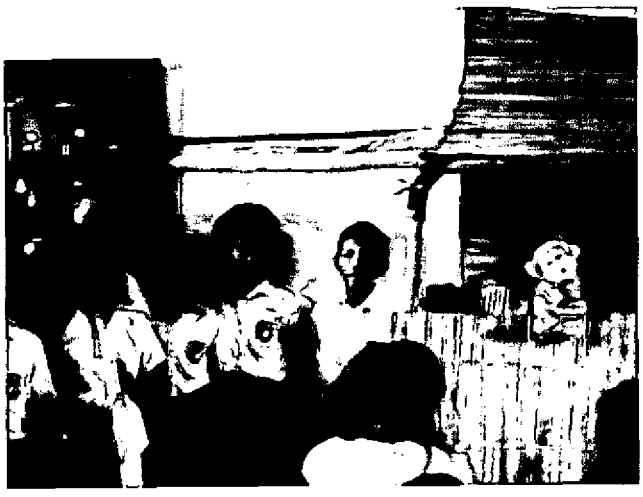


5. Sidorejo Elementary School 1(SDN Sidorejo 1) Pangkalan Bun

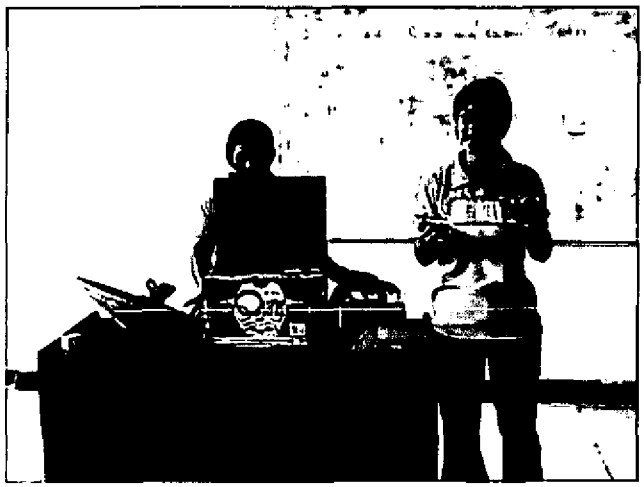


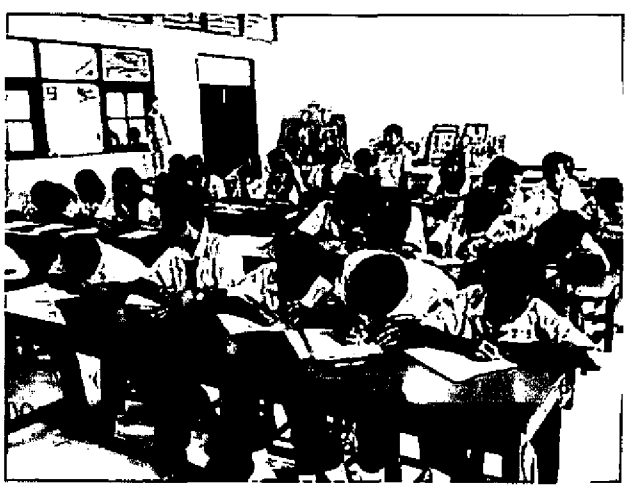




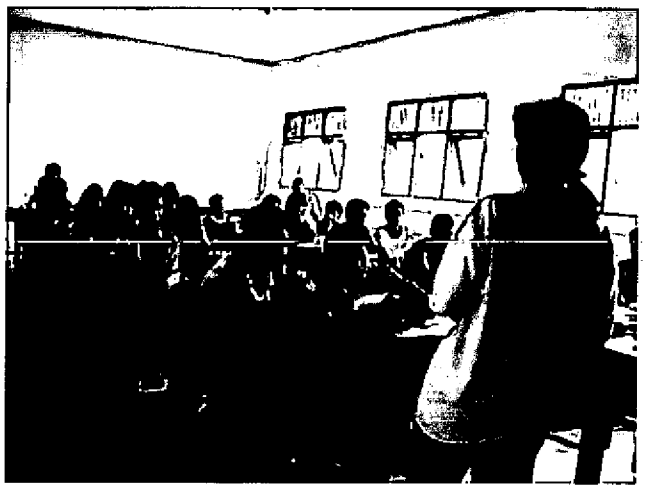


6. Junior High School 1 KUMAI
(SMPN-1 Kumai)

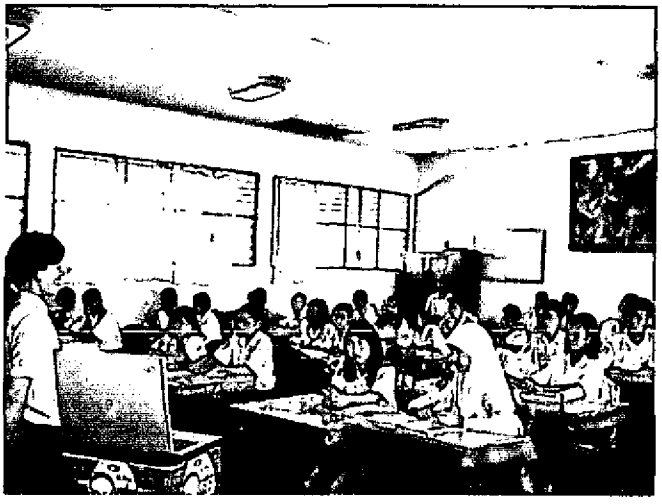


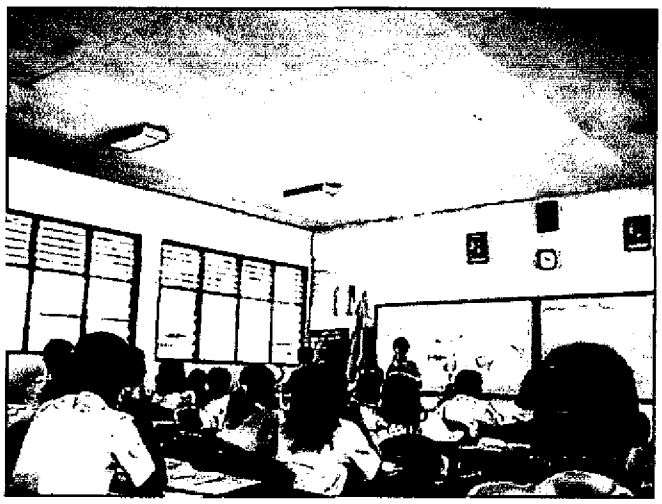


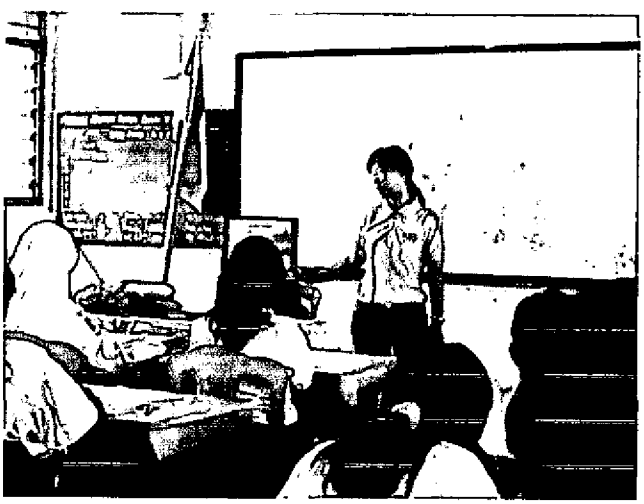
7. Senior High School 1 KUMAI
(SMAN-1 Kumai)



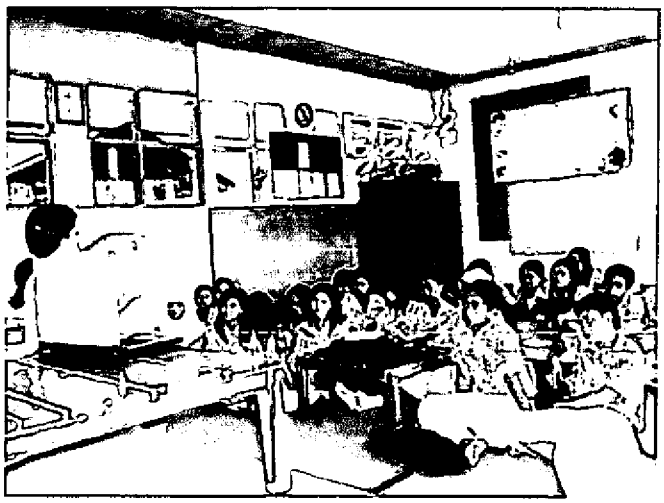
8. Senior High School 1 (SMAN-1)
Pangkalan Bun

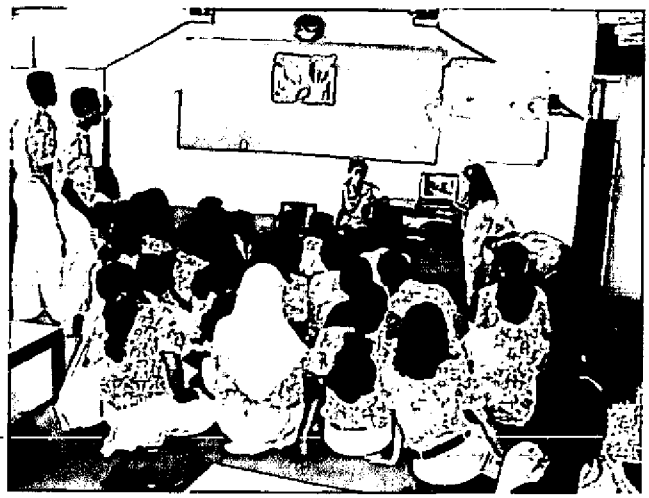


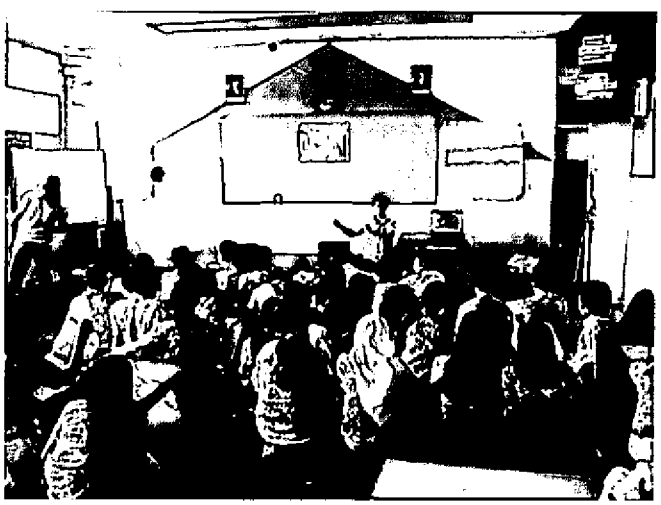




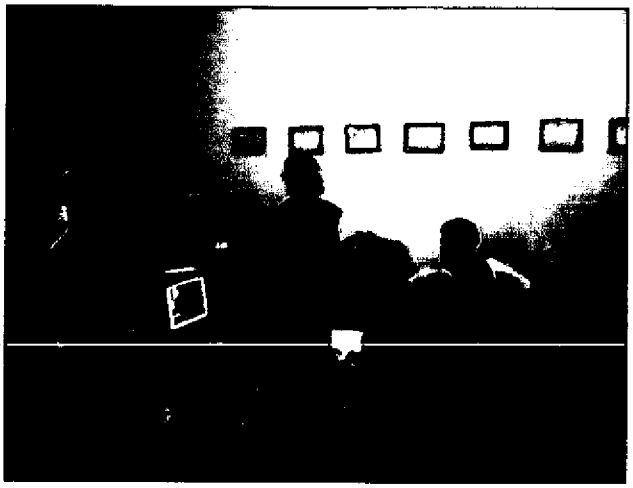
9. Senior High School 2 PANGKALAN BUN (SMAN-2 P.Bun)



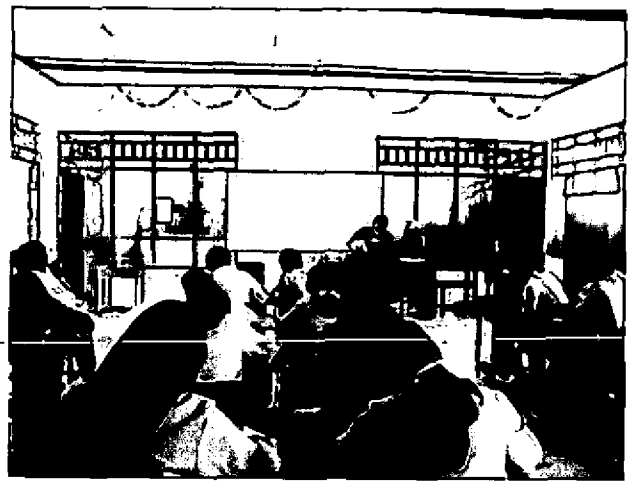




Training Volunteers/Heal Green Club in SMAN2 Pangkalan Bun



10. Senior High School 3 PANGKALAN BUN (SMAN-3 P.Bun)

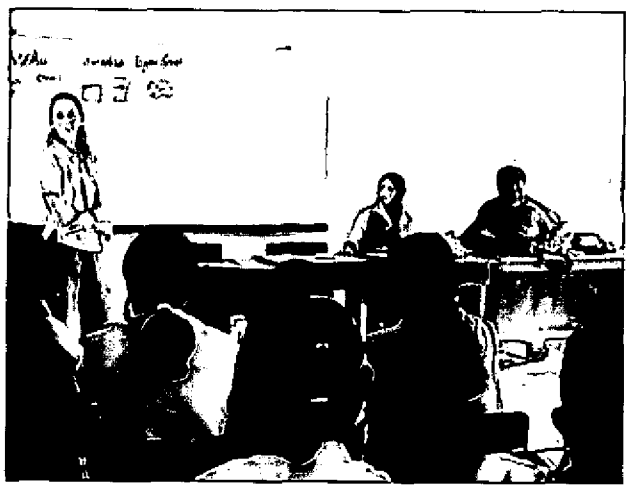


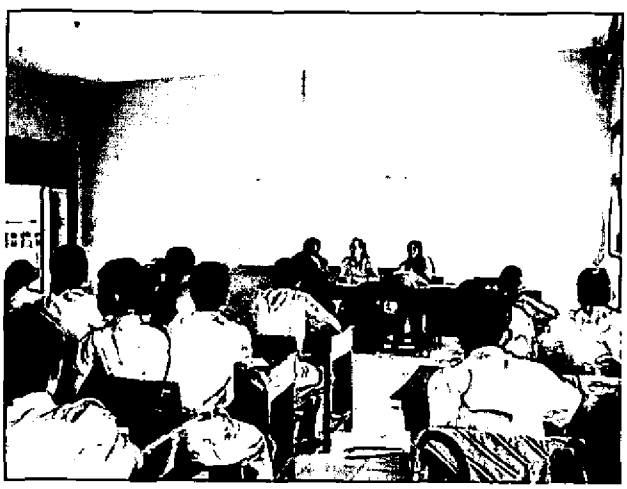
Volunteer (Komang and Arta give training)

11. Senior High School 1 PANGKALAN BUN (SMKN-1 P.Bun)

12. Senior High School 2 PANGKALAN BUN
(SMKN-2 P.Bun)

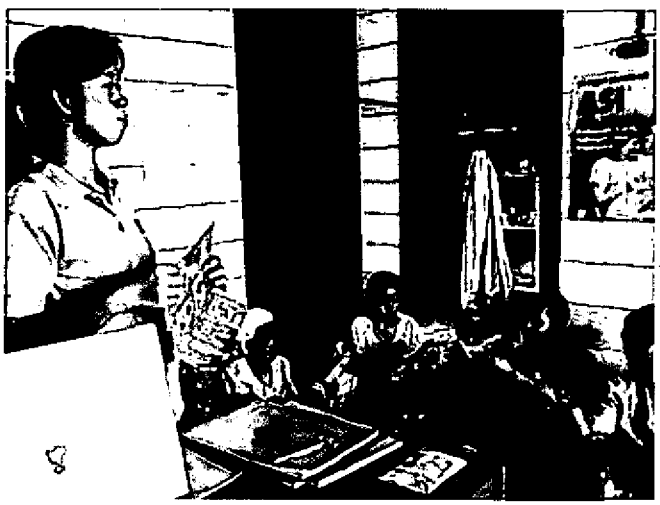
Mrs. Marini and Mary K.Howe give training





Sekonyer Village ;

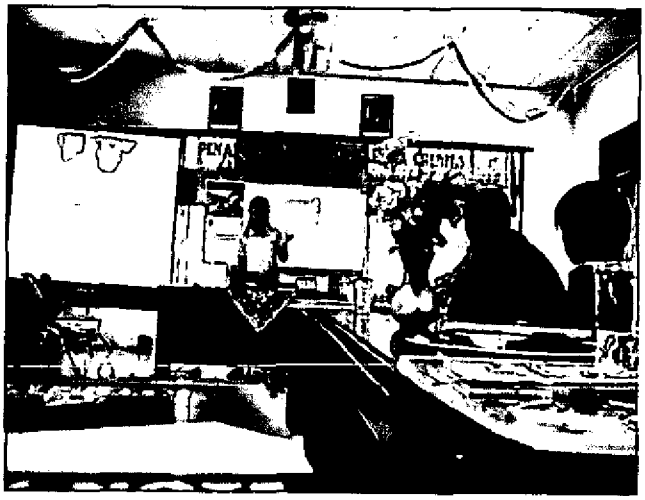
Training session

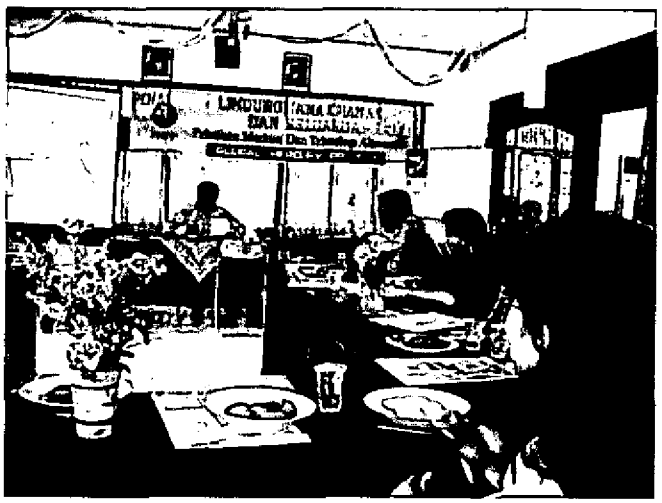


Hair sampling in Sekonyer Village

Blood sampling in Sekonyer VIllage

TRAINING FOR GOVERNMENT OFFICERS AND GOLD SHOPS OWNERS
Tanjung Puting National Park Autorty
PANGKALAN BUN (BTNTP)

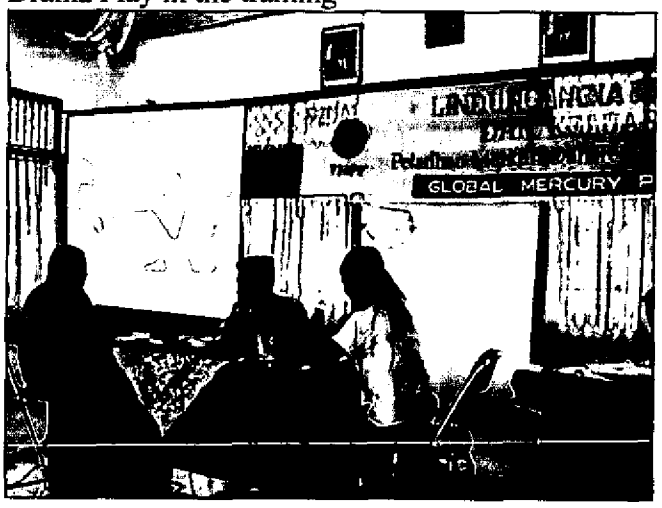




Opening by Park Authority Officer

Drama by Heal Green Club (volunteer from SMAN2 Pangkalan Bun)

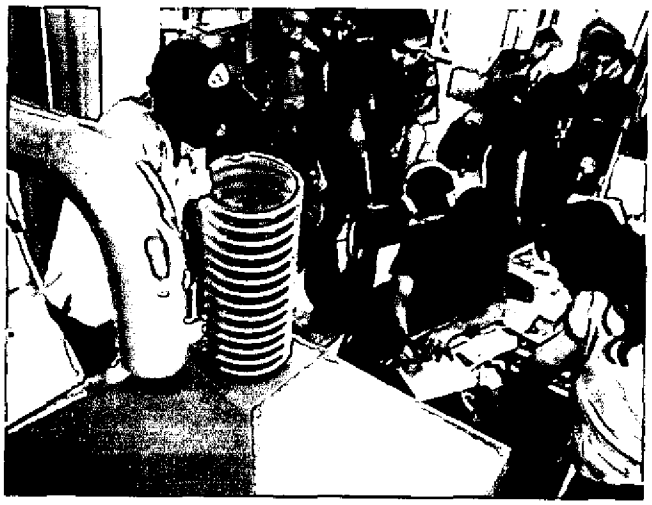
Drama Play in the training



Discussing the Fume Hood with gold shop owner

Pak Martin , a gold shop owner

Officer from *Bapedalda* Office



All participants

Handing the GMP booklet to the Bupati

Drama personnel, Heal Green Club (volunteer from SMAN2 Pangkalan Bun)

With Fisheries Department officer and a DPR officer

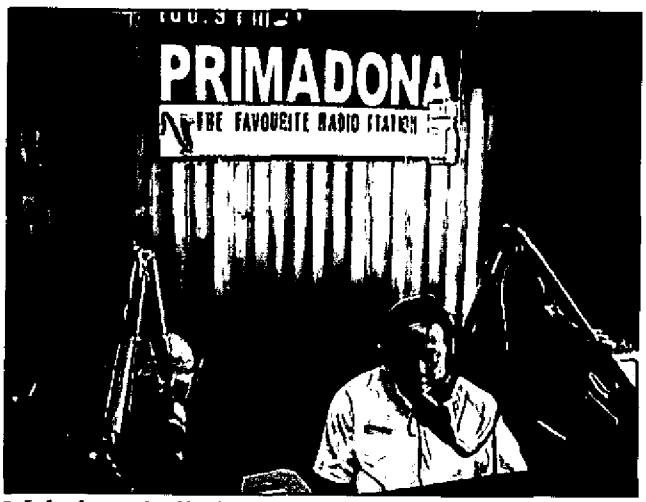
Drh. Yenny is giving Mercury information to Mr.Ujang Iskandar (Head of the Kota Waringin Barat District)

Drh.Yenny/FNPF distributing brochures in Bapedalda Office

RADIO BROADCAST
Primadona FM Radio PANGKALAN BUN

Mercury Hazard Session

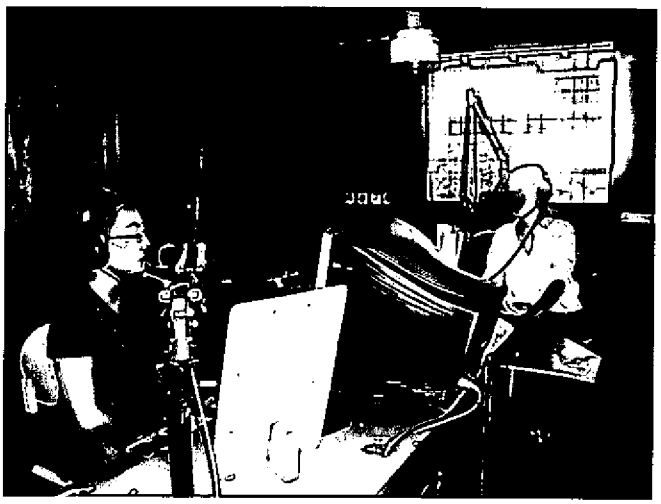
Alternative Technology Session

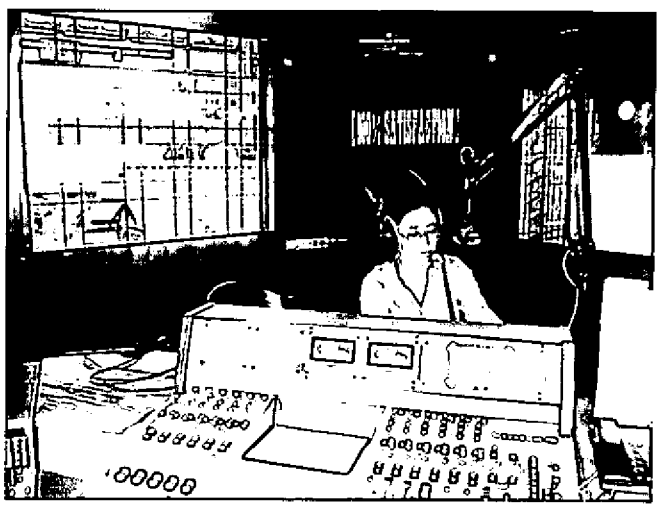


Malaria and Filariasis Session with Dr. Untung from Kumai Health Centre

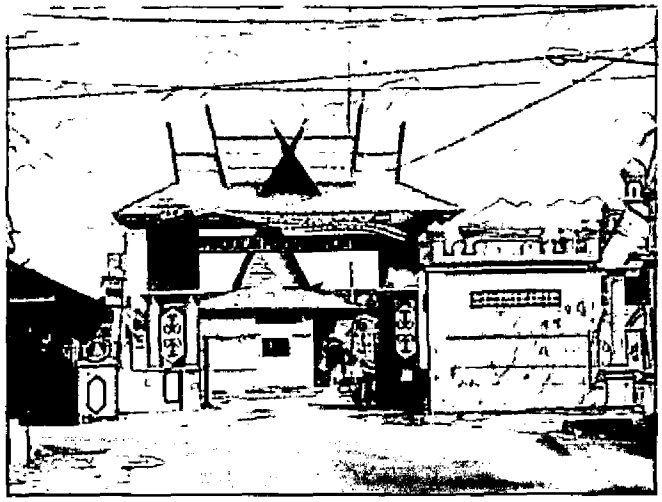
Winner of the Radio Quiz

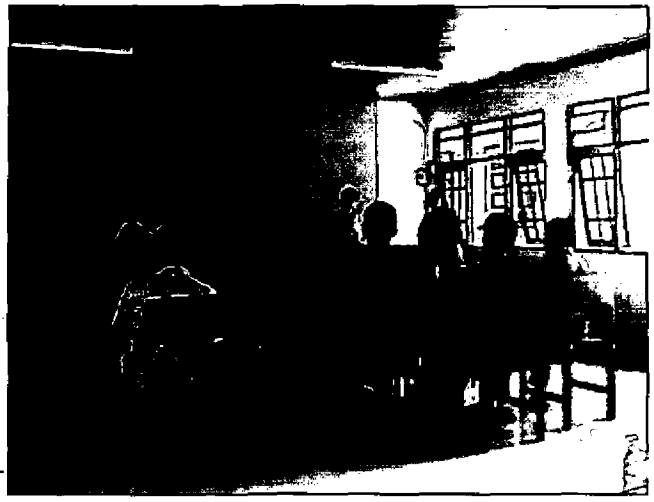
Additional Health Session (Tuberculosis)

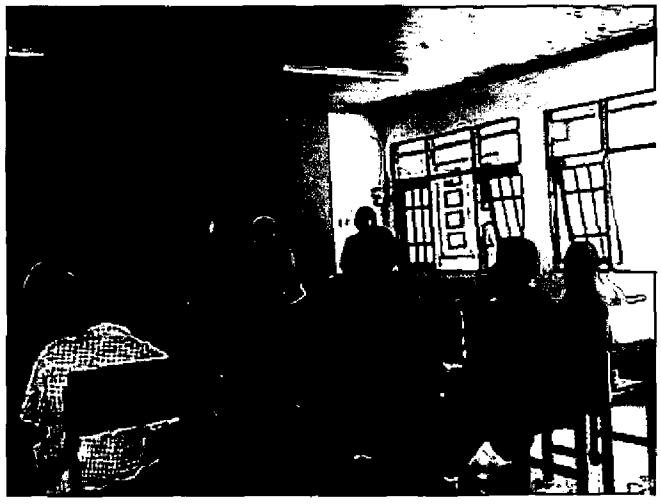


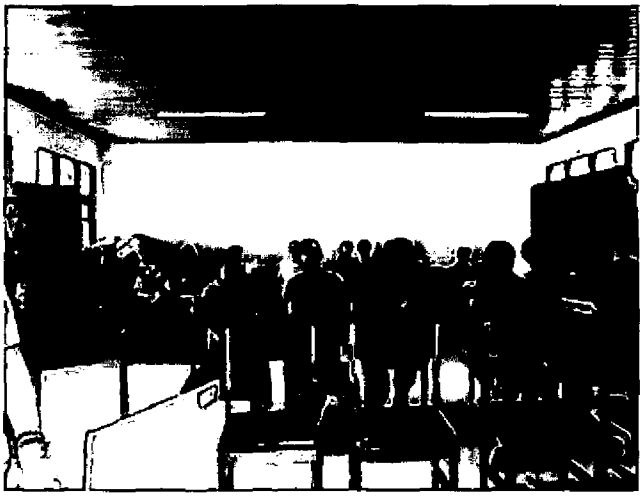


Training the Fisherman in Fishery Department Kumai /PPI KUMAI

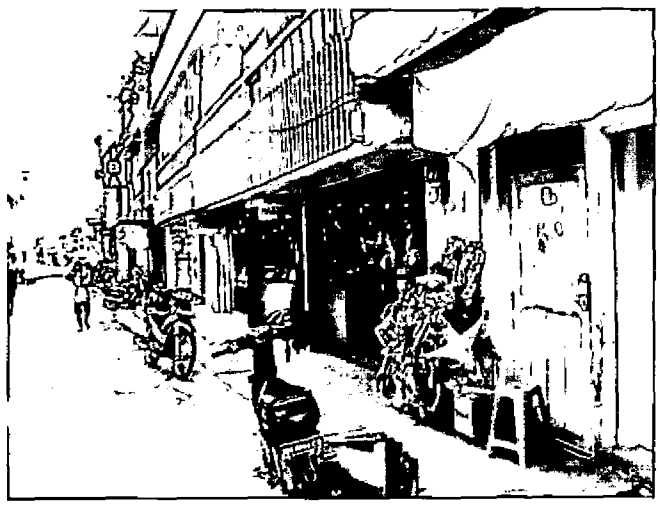




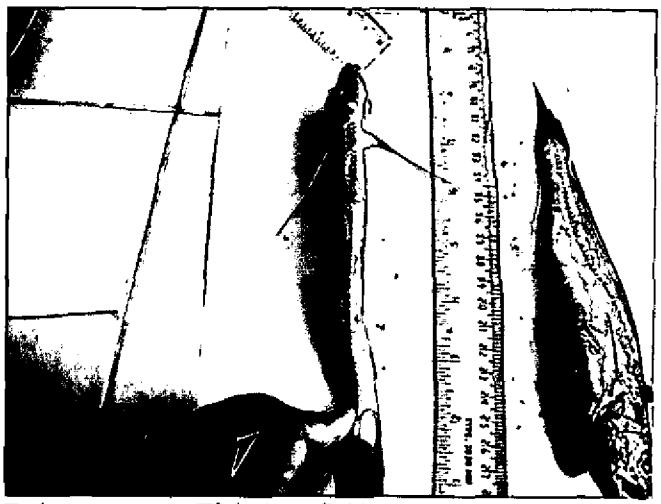




Gold Shop PANGKALAN BUN

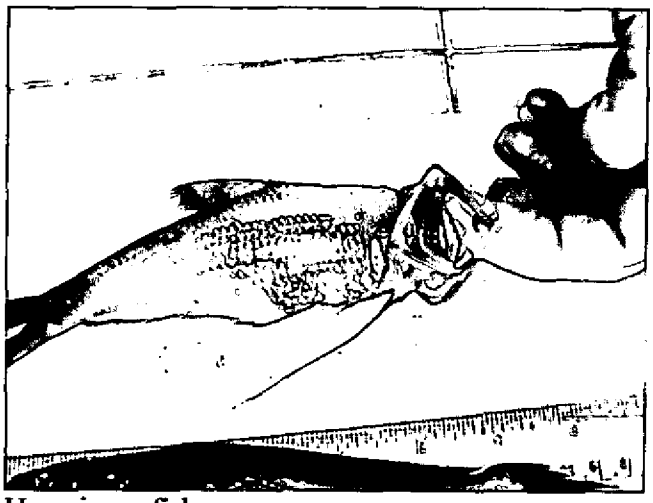


FISH SAMPLING

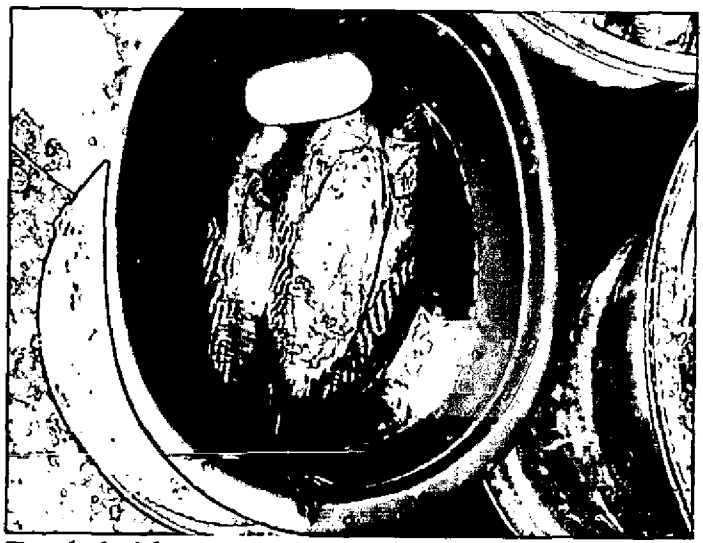


Belungsungan Fish (sea fish)

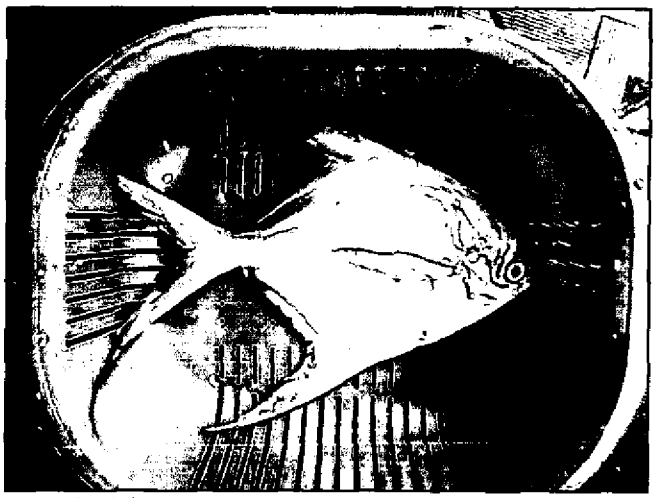
Sekonyer River fish



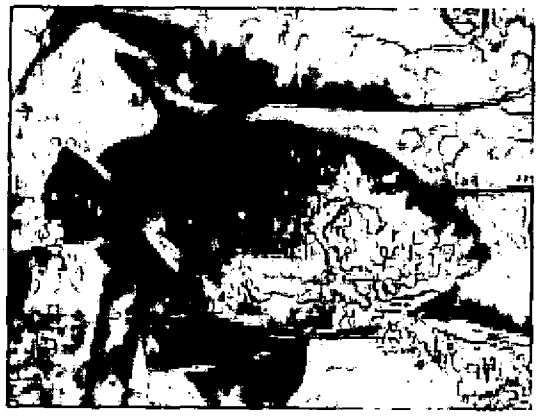
Hampirang fish



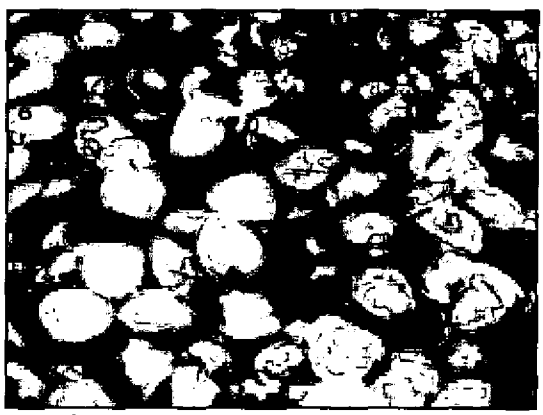
Tongkol Fish



Bawal Fish



Kakap fish/snaper fish



Kapah

Crab

BAHAYA AIR RAKSA SEDANG MENGINTIP ANDA!

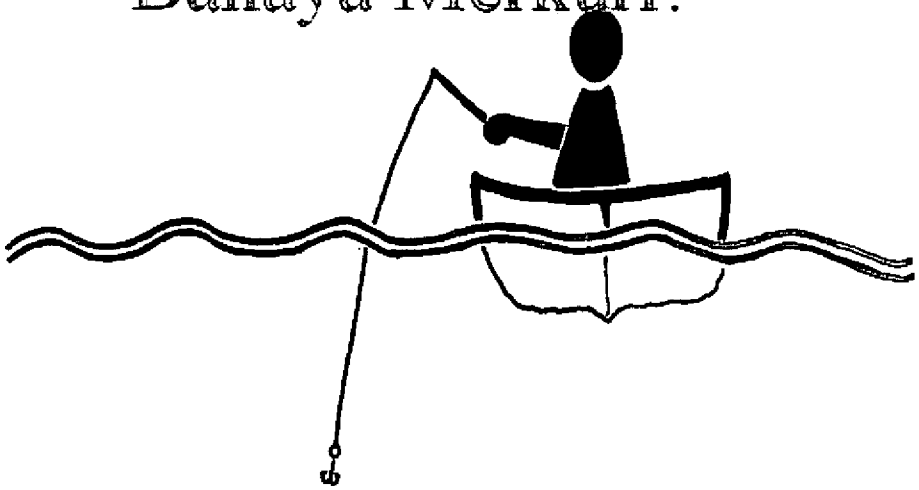
AIR RAKSA DAPAT MENYEBABKAN:

KERUSAKAN HATI, GINJAL, SYARAF, KEBUTAAN, GANGGUAN ORGAN SEKSUAL, GANGGUAN PERKEMBANGAN OTAK ANAK, DAN GANGGUAN KESEHATAN LAINNYA

GLOBAL MERCURY PROJECT

Awas!

Bahaya Merkuri!



Penggunaan Merkuri Dalam Jangka Panjang dapat mengakibatkan:

- Kebutaan, kerusakan Hati Ginjal & Organ Tubuh Lainnya
- Gangguan Organ Seksual
- Perkembangan Otak Terganggu

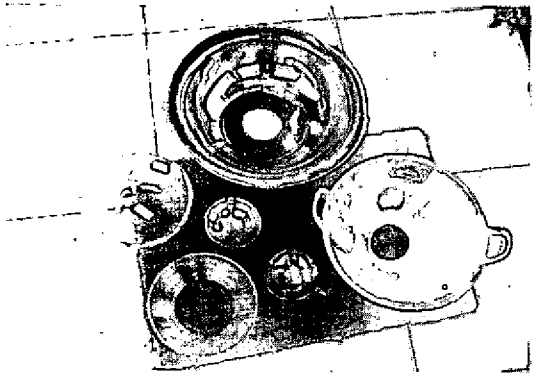
Masuknya Merkuri ke dalam Tubuh Manusia dapat Melalui Berbagai cara:

- Menyentuh Merkuri
- Menghirup uap Merkuri
- Memakan ikan yang tercemar Merkuri

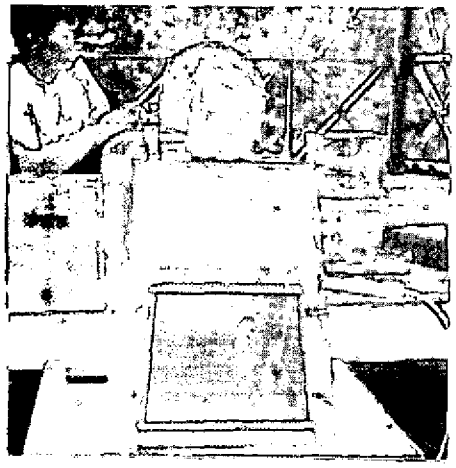
Global Mercury Project

UNIDO FNPF

Pergunakanlah raksa dengan hati-hati, yaitu ;



- **Jangan mengaduk RAKSA dengan tangan telanjang**
- **Pakai retort untuk melebur emas**
- **Jangan membuang sisa raksa ke sungai**
- **Jangan membuang baterai ke sungai**



LINDUNGI!!!

Anak-anak & Keluarga Anda DARI BAHAYA MERKURI

PROGRAM MERKURI GLOBAL
Informasi Lebih Lanjut :

Yayasan Pecinta/Penyantun Taman Nasional
(Friends of The National Parks Foundation)
Jl. Pelita No 51, Kelurahan Candi, Kec Kumai,
Kotawaringin Barat – Kalimantan Tengah
Telp/Fax : (0532) 61212
www.fnpf.org

AWAS!!!

Raksa Mengancam!!!

SEDIKIT RAKSA

lebih hemat, lebih sehat

Penggunaan RAKSA Dalam Jangka Panjang dapat Mengakibatkan :

- Kebutaan, Kerusaka n Hati, Ginjal & Organ Tubuh lainnya
- Gangguan Organ Seksual
- Perkembangan Otak Terganggu

- Ancaman penurunan kemampua n berpikir pada anak-anak

Masuknya Raksa ke dalam Tubuh Manusia dapat Melalui Berbagai Cara :

- Menyentuh raksa

- Menghirup uap raksa

- Memakan ikan yang tercemar raksa

Ikan yang tercemar raksa, antara lain:

- Ikan yang dipelihara di kolam amalgam
- Ikan besar yang memakan ikan lain, misal: Toman, hiu, telangtelang

Ikan yang aman dari pencemaran raksa, al:

- Ikan pemakan tanaman
- Ikan yang dipelihara di kolam ikan atau keramba, misalnya: mujair, seluang

Report on Hg Concentrations in the Hair Samples at Artisanal and Small Scale Gold Mining Locations in Central Kalimantan

Shunichi Honda, PhD

Department of Epidemiology, National Institute for Minamata Disease,
Ministry of the Environment, Japan
4058-18 Hama, Minamata City, Kumamoto 867-0008, Japan
Tel: +81-966-63-3111, Fax: +81-966-61-1145, Email: honda@nimd.go.jp

1. Samples

- 105 hair samples of the artisanal and small scale gold miners at Sekonyer River area in Central Kalimantan, collected by Friends of the National Park Foundation

2. Analytical method for total mercury and methylmercury concentrations

2.1. Total mercury

Total mercury (THg) concentration in the hair samples was determined by the wet digestion/reduction/cold vapour atomic absorption spectrometry (CVAAS: circulation-open air flow system)[1]. Hair samples were preliminarily washed with neutral detergent (diluted 100-fold) and distilled water by decantation, and wash again with little amount of acetone for removing water, then the residua acetone was removed under reduced pressure. Dried hair samples were cut into very small pieces by dissection scissors. Precisely weight of the sample (around 10 mg) was taken into a 50 mL-sample digestion flask. One mL of distilled water, 2 mL of HNO_3-$HClO_4$ (1+1), and 5 mL of H_2SO_4 were added the flask. The flask was heated on a hot plate at 230°C for 30 minutes. After cooling down, the volume of digested samples was fixed at 50 mL with distilled water, mixed well and analyzed by CVAAS (Automatic mercury analyzer, Model HG-201, Sanso Seisakusho Co., Ltd.).

2.2. Methylmercury

Methylmercury (MeHg) concentration in the hair samples was determined by the hydrochloric acid leaching/toluene extraction/gas-liquid chromatography with electron capture detection (GLC-ECD) method[1]. After washing and cutting the hair samples by the same method as the total mercury, each sample was precisely weighted (around 10 mg) into a 10 mL screw-capped round-bottom centrifuge tube. 2 drops of ethanol by a pasteur pipette was added to moisten the samples. A small amount of glass wool or cotton was put and lightly pressed to cover the sample being at the bottom of each tube by a glass rod. 3 mL of 2 N HCl was added onto the glass wool or cotton, taking care to keep the sample below the surface. After sealing a lid tightly, each tube was heated in an isothermal bath at 100°C for 5 minutes to elute methylmercury from the sample. After cooling and inverting each tube to mix, each tube was centrifuged at 1,200 rpm for 3 minutes. One mL of the supernatant in the tube was transferred into a 10-mL conical centrifuge tube provided with a glass stopper. 2 mL of toluene was added into the tube, and the tube was shaken for 3

minutes to extract the methylmercury present in the HCl phase into the toluene phase. The tube was centrifuged at 1,200 rpm for 3 minutes. The lower phase was removed by the suction-removal system, and the toluene phase was used as a test solution for methylmercury analysis by GLC-ECD (Gas chromatograph, G 6800, Yanaco).

3. Results

This study distinguished three mercury forms: THg, MeHg and Inorganic mercury (IHg = THg – MeHg). IHg by this equation contains Hg^0 (metallic), Hg_2^{++} (mercurous) and Hg^{++} (mercuric) because this analysis method can not distinguish these three forms. However, IHg in the hair samples collected from ASM is mostly Hg^0 due to mercury vapour exposure. Table 1 shows the results of THg, MeHg and IHg in the hair samples which exceeded 50 μg·THg/g (Threshold for onset of neurological symptoms in human body (level at which neurological symptoms would appear in the most susceptible adults))[2], 12 MeHg·μg/g (BMDL: a benchmark-dose lower-confidence limit for maternal hair (for child-bearing age women))[3] and 2.3 MeHg·μg/g (PTWI: a provisional tolerable weekly intake[3]. This case considers as MeHg concentration for female of child-bearing age because of ASM locations where mercury vapour exposure is in question. THg concentrations of No.1 and 2 samples were 407.3 and 176.0 μg/g, and it seems to be due to a heavily indirect exposure of mercury vapour, hair colour or other factors because they are kid and

Table 1 Results of the hair samples which exceeded 50 μg THg/g as the threshold, 12 μg MeHg/g as BMDL or 2.3 MeHg·μg/g as PTWI for female of child-bearing age

No.	Occupation	Gender	Age	Location	THg	MeHg	IHg	IHg/THg
						μg/g		%
1	Kid	Female	14	Aspai sebrang	407.3	12.3	395.0	97.0
2	House wife	Female	37	Sekonyer	176.0	3.5	172.5	98.0
3	Zircon miner	Male	35	Rasau	79.0	1.7	77.3	97.9
4	Mixer	Female	32	Rasau	56.0	2.1	53.9	96.2
5	House wife	Female	30	Sekonyer	52.0	2.1	50.0	96.1
6	Shop owner	Female	28	Aspai sebrang	54.6	4.5	50.2	91.8
7	Burner	Female	28	Rasau	54.4	4.3	50.1	92.0
8	Mixer	Female	34	Aspai sebrang	16.7	12.5	4.2	25.1
9	Mixer	Female	29	Aspai sebrang	12.9	11.3	1.7	87.2
10	House wife	Female	35	Sekoner	16.4	10.7	5.7	65.2
11	All (mixer/burner)	Female	44	Rasau	14.0	8.5	5.5	60.5
12	Zircon miner	Female	45	Aspai sebrang	23.1	7.0	16.2	30.0
13	House wife	Female	35	Sekonyer	13.3	6.7	6.6	50.5
14	House wife	Female	24	Aspai sebrang	13.7	6.4	7.3	46.5
15	House wife	Female	25	Aspai sebrang	43.4	5.4	38.0	12.4
16	House wife	Female	20	Aspai sebrang	5.9	4.4	1.5	75.2
17	House wife	Female	36	Sekonyer	5.2	4.1	1.1	79.0
18	House wife	Female	27	Sekonyer	5.1	3.3	1.7	66.1
19	Pit miner	Female	40	Rasau	4.6	3.1	1.4	68.7
20	All (mixer/burner)	Female	30	Rasau	33.1	3.1	30.0	9.3
21	House wife	Female	30	Sekonyer	4.4	2.7	1.7	60.7
22	House wife	Female	36	Sekonyer	5.2	2.6	2.6	49.5
23	House wife	Female	38	Sekonyer	2.9	2.5	0.4	87.1
24	Control	Female	21	Sekonyer	3.7	3.3	0.4	9.6

housewife. In order for a statistical analysis, both of these two data were eliminated. THg concentrations of No. 3 to 7 were more than 50 μg/g which maybe slightly show some symptoms, such as fatigue, irritability, depression, etc, because Hg concentration around 50 μg/g in hair is associated with a 5% risk of neurological damage to adults[4]. Those persons were exposed by mercury vapour because all of IHg/THg ratios for those persons were more than 90%. MeHg concentration of No. 8 was more than 12 μg/g as BMDL, and this means that her child may be inferior on the neuropsychological test performances to other children when her child becomes 7 years-old[5]. MeHg concentrations from No. 6 to No. 24 were more than 2.3 μg/g as PTWI which is defined as the most sensitive toxicological end-point (developmental neurotoxicity) in the most susceptible humans. Of those female whose MeHg concentrations were more than PTWI, No. 24 person is thought to eat a lot of fish and seafood daily because of the control sample and 9.6% of IHg/THg ratio which does not consider mercury vapour exposure.

Figure 1 shows THg, MeHg and IHg concentrations on each occupation at each sampling location (also see the Annex 1-1 to 1-4). THg concentrations as the overall average were 9.0 ± 11.6 μg/g for male, 14.4 ± 17.4 μg/g for female and 15.7 ± 18.1 μg/g for female (child-bearing age: 15-45). These mean concentrations are higher than THg concentrations in the hair samples of general population collected from other Asian countries, such as Japan (Male: 2.5 μg/g; Female: 1.6 μg/g)[6], Zhoushan Island in China (Male: 5.4 μg/g; Female: 4.0 μg/g)[6], Hong Kong (Male: 4.0 μg/g; Female 1.6 μg/g)[6], Hoa Binh in Vietnam (Male 1.2 μg/g; Female 0.88 μg/g)[6], Bangladesh (0.44 on average of both male and female) and Cambodia (Male: 2.63 μg/g; Female: 2.76 μg/g)[7]. However, THg concentrations in a certain ASM location ranged from 0.08 to 153.25 μg/g (the detailed data is not available)[8].

IHg concentration as the overall average were 4.0 ± 10.1 μg/g for male, 10.4 ± 17.1 μg/g for female and 11.5 ± 17.9 μg/g for female (child-bearing age). MeHg concentration as the overall average were 5.0 ± 4.5 μg/g for male, 4.0 ± 3.0 μg/g for female and 4.2 ± 3.1 μg/g for female (child-bearing age). As the overview on IHg and MeHg concentrations, mercury exposure is mainly caused by mercury vapour of the ASM activities, because the ration of IHg/THg is around 60% (in cases of no exposure to external inorganic mercury or mercury vapour, almost all mercury more than 90%) in hair is in the form of methylmercury[1]).

THg concentrations of zircon miners, burners, mixers, shop owners and house wife were relatively higher than those of other occupations. Of these occupations, zircon miners, burners and mixers were thought to be direct mercury vapour exposure due to their occupations. However, the mercury exposure way to the shop owners and house wife is thought to be indirect exposure of mercury vapour at inside of building or home due to ASM activities of their family, such as

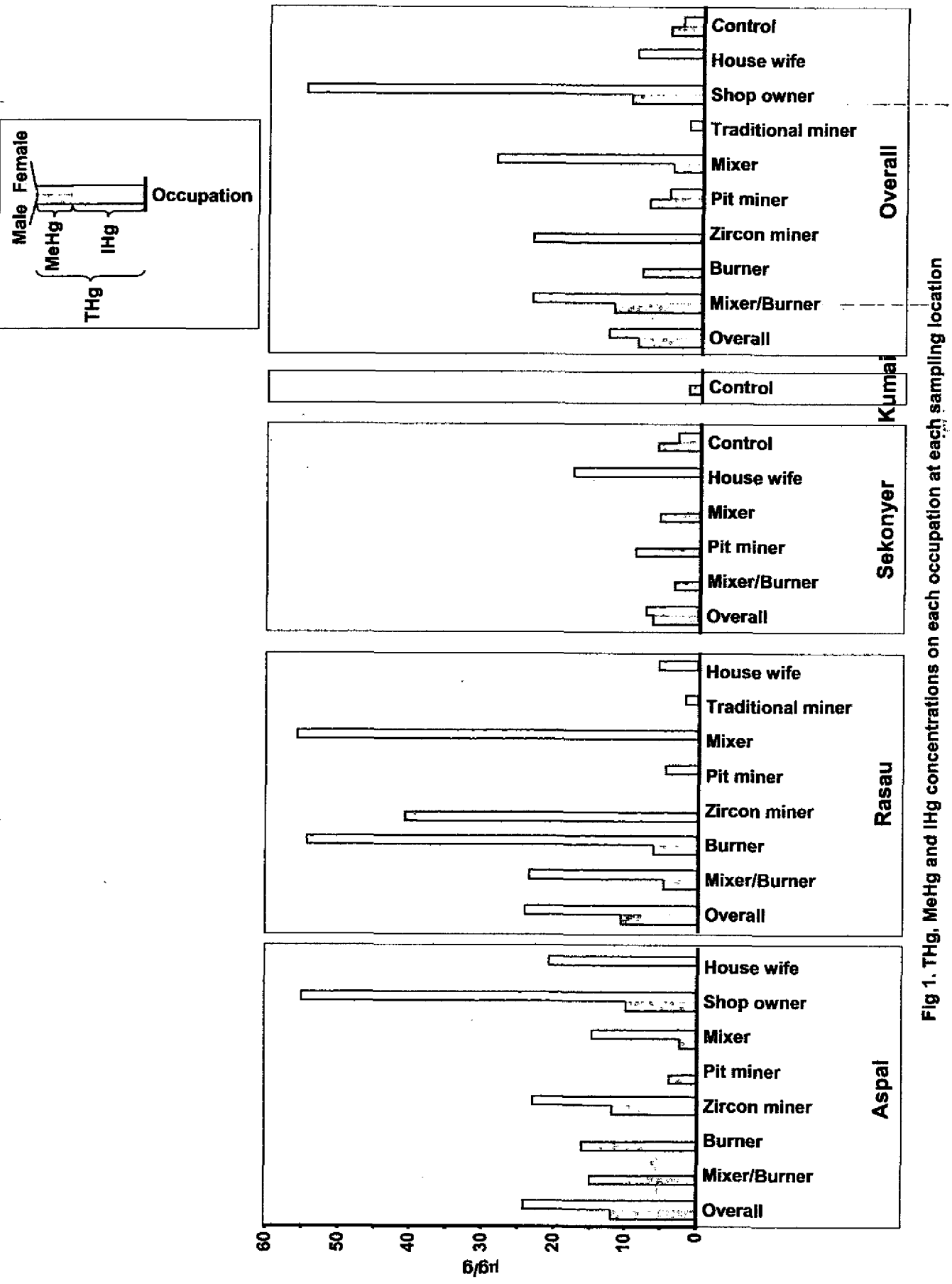


Fig 1. THg, MeHg and IHg concentrations on each occupation at each sampling location

mercury vapour by burning amalgams in pans. This indirect mercury vapour exposure is one of the most dangerous ways, because the persons who are indirectly exposed by mercury vapour have no idea how they are being exposed by mercury vapour.

4. Necessary actions

- To confirm a source of mercury exposure of 2 females whose THg concentrations are 407 and 176 μg/g (No.1 and 2);
- To confirm food consumption patter of the kid whose MeHg concentration was 12.3 μg/g (No.1). If she eats a lot of fish and seafood, an appropriate consumption pattern of fish and seafood should be taught to her parent. If it is due to hair colour or wave, it is necessary to confirm the contents affecting THg concentration in the hair. If it is caused by mercury vapour of ASM activities, she should immediately be left from the current environment;
- To exactly confirm a mercury exposure way to the person whose MeHg concentration was 12.5 μg/g (No. 8). If it is caused by mercury vapour of ASM activities and she is pregnant or she might be pregnant, she immediately has to quite her job and leave the current environment. If it is due to seafood consumption, she has to reduce amount of fish consumption, and THg and MeHg concentrations in fish and seafood should be analysed;
- To confirm whether the persons whose THg concentrations were more than 50 μg/g (No. 3 to 7) show any symptoms such as fatigue, irritability, depression, etc. If they have any symptoms, they should immediately quite the current jobs and take medical treatment, especially, female in these persons even if their MeHg concentrations are less than 12 μg/g;
- To give the information about PTWI to the persons of child-bearing age whose MeHg concentrations were more 2.3 μg/g. For example, the current MeHg concentration is more than 2.3 μg/g as PTWI that such MeHg concentration would cause adverse effect to human health in the most susceptible humans, such as female of child-bearing age or her child;
- If possible, THg concentration in the blood of the persons mentioned in Table 1 should be analyzed;
- To investigate the indirect mercury exposure way to the shop owners and house wives. If there is any mercury vapour-exposure due to burning amalgams at inside of building or home, this burning should immediately be stopped. If the shop owners and house wives implement a part of ASM activities, especially burning amalgams, they have to stop their current activities for ASM, or the working environment should be changed. In this case, all their family members are targeted for further mercury investigation due to the indirect mercury vapour exposure;
- To investigate fish and seafood consumption patterns and its amount because MeHg concentrations in the samples were relatively high compared to those of other countries. In addition, THg and MeHg in fish and seafood should be analyzed if they eat a lot of fish

and seafood collected at pond or water areas in or around ASM locations because of the speculation of mercury exposure to fish and seafood;

- To collect much more hair samples for exactly identifying mercury vapour exposure to humans so that health assessments against mercury vapour exposure in this area would be prepared.

5. References

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Annex 1-1 (Overall Hg data)

		Overall					
				THg	IHg	MeHg	IHg/THg
Area	Occupation	No.	Age	µg/g	µg/g	µg/g	%
Aspai	Overall	33	28	26.7 ± 69.6	19.6 ± 68.4	7.1 ± 5.3	43.4 ± 27.6
	All (mixer/burner)	13	30	15.1 ± 13.2	6.5 ± 8.5	8.6 ± 6.9	36.3 ± 26.0
	Burner	2	46	16.3 ± 6.5	7.4 ± 7.1	8.9 ± 0.7	39.9 ± 27.9
	Zircon miner	4	28	14.8 ± 11.3	9.3 ± 9.1	5.6 ± 2.5	50.1 ± 26.9
	Pit miner	3	23	4.1 ± 3.3	2.0 ± 2.2	2.1 ± 1.3	43.9 ± 23.4
	Mixer	4	28	8.7 ± 7.2	2.3 ± 1.4	6.4 ± 6.3	41.6 ± 26.6
	Shop owner	3	27	24.9 ± 26.2	17.8 ± 28.1	7.1 ± 4.5	40.1 ± 44.8
	House wife	3	23	21.0 ± 19.8	15.6 ± 19.6	5.4 ± 1.0	55.3 ± 31.5
	Kid	1	14	407.3	395.0	12.3	97.0
Rasau	Overall	23	36	14.6 ± 20.8	11.3 ± 20.8	3.3 ± 2.8	51.6 ± 27.2
	All (mixer/burner)	6	34	11.1 ± 11.5	7.5 ± 11.2	3.6 ± 2.8	54.7 ± 24.2
	Burner	9	35	11.7 ± 16.6	7.6 ± 16.1	4.0 ± 3.8	44.5 ± 25.9
	Zircon miner	2	33	40.9 ± 53.9	39.3 ± 53.8	1.6 ± 0.1	71.3 ± 37.6
	Pit miner	2	50	7.4 ± 4.0	4.0 ± 3.6	3.4 ± 0.4	47.7 ± 23.2
	Mixer	2	44	30.1 ± 36.6	27.7 ± 37.0	2.4 ± 0.4	66.4 ± 42.1
	Traditional miner	1	40	1.9	0.2	1.7	8.9
	House wife	1	28	5.6	4.4	1.2	78.5
Sekonyer	Overall	42	33	7.0 ± 8.0	2.8 ± 7.6	4.1 ± 3.0	67.2 ± 19.4
	All (mixer/burner)	1	29	3.5	1.5	2.0	43.7
	Pit miner	6	33	9.1 ± 4.0	1.8 ± 1.3	7.3 ± 3.0	18.1 ± 6.7
	Mixer	2	40	5.5 ± 0.9	1.8 ± 0.1	3.7 ± 1.0	33.0 ± 7.4
	House wife	16	34	19.0 ± 43.6	15.8 ± 43.5	3.2 ± 2.5	47.9 ± 25.3
	Control	18	32	5.2 ± 3.2	1.2 ± 0.7	4.1 ± 3.1	27.4 ± 15.8
Kumai	Control	6	18	1.7 ± 0.7	0.3 ± 0.2	1.4 ± 0.8	24.7 ± 21.4
Overall	Overall	103	31	10.8 ± 13.9	6.1 ± 13.1	4.7 ± 4.1	60.7 ± 24.7
	All (mixer/burner)	20	31	13.3 ± 12.4	6.6 ± 9.0	6.8 ± 6.2	42.2 ± 25.6
	Burner	11	37	12.5 ± 15.1	7.6 ± 14.5	4.9 ± 4.0	43.7 ± 24.8
	Zircon miner	6	30	23.5 ± 29.0	19.3 ± 29.5	4.2 ± 2.8	57.1 ± 28.9
	Pit miner	11	33	7.4 ± 4.1	2.2 ± 2.0	5.2 ± 3.3	30.5 ± 19.8
	Mixer	8	35	13.3 ± 18.0	8.5 ± 18.3	4.7 ± 4.6	45.6 ± 27.3
	Traditional miner	1	40	1.9	0.2	1.7	8.9
	Shop owner	3	27	24.9 ± 26.2	17.8 ± 28.1	7.1 ± 4.5	40.2 ± 44.8
	House wife	20	32	18.7 ± 39.4	15.2 ± 39.2	3.4 ± 2.4	50.5 ± 25.7
	Kid	1	14	407.3	395.0	12.3	97.0
	Control	24	28	4.4 ± 3.2	1.0 ± 0.7	3.4 ± 2.9	26.7 ± 16.9

Annex 1-2 (Hg data for male)

		Male					
				THg	IHg	MeHg	IHg/THg
Area	Occupation	No.	Age	μg/g	μg/g	μg/g	%
Aspai	Overall	25	28	12.1 ± 11.2	5.3 ± 7.2	6.8 ± 5.8	38.8 ± 24.4
	All (mixer/burner)	13	30	15.1 ± 13.2	6.5 ± 8.5	8.6 ± 6.9	36.3 ± 26.0
	Burner	2	46	16.3 ± 6.5	7.4 ± 7.1	8.9 ± 0.7	39.9 ± 27.9
	Zircon miner	3	22	12.1 ± 12.1	7.0 ± 9.6	5.1 ± 2.9	43.4 ± 28.6
	Pit miner	3	23	4.1 ± 3.3	2.0 ± 2.2	2.1 ± 1.3	43.9 ± 23.3
	Mixer	2	24	2.6 ± 1.5	1.7 ± 0.9	1.0 ± 0.6	64.2 ± 1.8
	Shop owner	2	26	10.0 ± 6.9	1.6 ± 1.4	8.5 ± 5.5	14.3 ± 3.9
	House wife				-		
	Kid				-		
Rasau	Overall	14	34	10.8 ± 19.9	7.6 ± 20.1	3.2 ± 3.3	46.4 ± 23.7
	All (mixer/burner)	4	32	4.9 ± 2.3	2.3 ± 1.3	2.5 ± 2.0	49.6 ± 20.8
	Burner	8	36	6.3 ± 4.4	2.3 ± 2.2	4.0 ± 4.1	38.6 ± 20.1
	Zircon miner	2	33	40.9 ± 53.9	39.3 ± 53.8	1.6 ± 0.1	71.3 ± 37.6
	Pit miner				-		
	Mixer				-		
	Traditional miner				-		
	House wife				-		
Sekonyer	Overall	24	32	6.5 ± 3.5	1.5 ± 0.8	5.0 ± 3.2	27.0 ± 14.8
	All (mixer/burner)	1	29	3.5	1.5	2.0	43.7
	Pit miner	6	33	9.1 ± 4.0	1.8 ± 1.3	7.3 ± 3.0	18.1 ± 6.7
	Mixer	2	40	5.5 ± 0.9	1.8 ± 0.1	3.7 ± 1.0	33.0 ± 7.4
	House wife				-		
	Control	15	31	5.8 ± 3.2	1.3 ± 0.7	4.5 ± 3.2	28.6 ± 16.7
Kumai	Control	6	18	1.7 ± 0.7	0.3 ± 0.2	1.4 ± 0.8	24.7 ± 21.4
Overall	Overall	69	30	9.0 ± 11.6	4.0 ± 10.1	5.0 ± 4.5	35.0 ± 22.1
	All (mixer/burner)	18	30	12.2 ± 12.1	5.3 ± 7.5	6.9 ± 6.5	39.6 ± 24.2
	Burner	10	38	8.3 ± 6.2	3.3 ± 3.8	5.0 ± 4.2	38.9 ± 20.0
	Zircon miner	5	26	23.6 ± 32.4	19.9 ± 32.9	3.7 ± 2.8	54.6 ± 31.6
	Pit miner	9	29	7.5 ± 4.3	1.9 ± 1.5	5.6 ± 3.6	26.7 ± 18.2
	Mixer	4	32	4.1 ± 1.9	1.7 ± 0.5	2.3 ± 1.7	48.6 ± 18.5
	Traditional miner				-		
	Shop owner	2	26	10.0 ± 6.9	1.6 ± 1.4	8.5 ± 5.5	14.3 ± 3.9
	House wife				-		
	Kid				-		
	Control	21	27	4.6 ± 3.3	1.1 ± 0.7	3.6 ± 3.0	27.5 ± 17.7

Annex 1-3 (Hg data for female)

		Female					
				THg	IHg	MeHg	IHg/THg
Area	Occupation	No.	Age	µg/g	µg/g	µg/g	%
Aspai	Overall	7	29	24.3 ± 17.9	17.0 ± 19.9	7.3 ± 3.3	47.8 ± 32.1
	All (mixer/burner)				-		
	Burner				-		
	Zircon miner	1	45	23.1	16.2	6.9	70.0
	Pit miner				-		
	Mixer	2	32	14.8 ± 2.7	2.9 ± 1.8	11.9 ± 0.9	18.9 ± 8.7
	Shop owner	1	28	54.6	50.6	4.5	91.8
	House wife	3	23	21.0 ± 19.8	15.6 ± 19.6	5.4 ± 1.0	55.3 ± 31.5
	Kid				-		
Rasau	Overall	9	40	20.4 ± 21.8	17.1 ± 21.8	3.4 ± 2.1	59.8 ± 31.7
	All (mixer/burner)	2	37	23.6 ± 13.5	17.8 ± 17.3	5.8 ± 3.8	65.1 ± 36.2
	Burner	1	28	54.4	50.1	4.3	92.1
	Zircon miner				-		
	Pit miner	2	50	7.4 ± 4.0	4.0 ± 3.6	3.4 ± 0.4	47.7 ± 23.2
	Mixer	2	44	30.1 ± 36.6	27.7 ± 37.0	2.4 ± 0.4	66.4 ± 42.1
	Traditional miner	1	40	1.9	0.2	1.7	8.9
	House wife	1	28	5.6	4.4	1.2	78.5
Sekonyer	Overall	18	34	7.5 ± 11.7	4.6 ± 11.5	3.0 ± 2.4	59.3 ± 22.3
	All (mixer/burner)				-		
	Pit miner				-		
	Mixer				-		
	House wife	16	34	19.0 ± 43.6	15.8 ± 43.5	3.2 ± 2.5	47.9 ± 25.3
	Control	3	36	2.4 ± 1.2	0.4 ± 0.1	1.9 ± 1.2	21.3 ± 10.3
Kumai	Control				-		
Overall	Overall	34	34	14.4 ± 17.4	10.4 ± 17.1	4.0 ± 3.0	51.9 ± 27.5
	All (mixer/burner)	2	37	23.6 ± 13.5	17.8 ± 17.3	5.8 ± 3.8	65.1 ± 36.2
	Burner	1	28	54.4	50.1	4.3	92.1
	Zircon miner	1	45	23.1	16.2	6.9	70.0
	Pit miner	2	50	7.4 ± 4.0	4.0 ± 3.6	3.4 ± 0.4	47.7 ± 23.2
	Mixer	4	38	22.4 ± 23.0	15.3 ± 25.7	7.1 ± 5.5	42.7 ± 37.0
	Traditional miner	1	40	1.9	0.2	1.7	8.9
	Shop owner	1	28	54.6	50.1	4.5	91.8
	House wife	19	32	10.4 ± 13.8	6.9 ± 13.3	3.4 ± 2.4	52.0 ± 23.8
	Kid				-		
	Control	3	36	2.4 ± 1.2	0.4 ± 0.1	1.9 ± 1.2	21.3 ± 10.3

Annex 1-4 (Hg data for child-bearing age female)

		Female (child-bearing age: 15-45)					
				THg	IHg	MeHg	IHg/THg
Area	Occupation	No.	Age	µg/g	µg/g	µg/g	%
Aspai	Overall	7	29	24.3 ± 17.9	17.0 ± 19.5	7.3 ± 3.3	53.2 ± 32.1
	All (mixer/burner)				-		
	Burner				-		
	Zircon miner	1	45	23.1	16.2	6.9	70.0
	Pit miner				-		
	Mixer	2	32	14.8 ± 2.7	2.9 ± 1.8	11.9 ± 0.9	18.9 ± 8.7
	Shop owner	1	28	54.6	50.6	4.5	91.8
	House wife	3	23	21.0 ± 19.8	15.6 ± 19.6	5.4 ± 1.0	55.3 ± 31.5
	Kid				-		
Rasau	Overall	7	35	24.2 ± 23.6	20.8 ± 23.6	3.4 ± 2.5	62.4 ± 35.2
	All (mixer/burner)	2	37	23.6 ± 13.5	17.8 ± 17.3	5.8 ± 3.8	65.1 ± 36.2
	Burner	1	28	54.4	50.1	4.3	92.1
	Zircon miner				-		
	Pit miner	1	40	4.6	1.4	3.1	31.3
	Mixer	1	32	56.0	53.9	2.1	96.2
	Traditional miner	1	40	1.9	0.2	1.7	8.9
	House wife	1	28	5.6	4.4	1.2	78.5
Sekonyer	Overall	17	31	8.1 ± 12.3	5.1 ± 3.0	3.1 ± 2.5	57.4 ± 22.9
	All (mixer/burner)				-		
	Pit miner				-		
	Mixer				-		
	House wife	14	31	8.9 ± 13.1	5.7 ± 12.9	3.2 ± 2.7	54.0 ± 22.3
	Control	2	26	2.8 ± 1.2	0.6 ± 0.5	2.4 ± 1.3	19.3 ± 13.7
Kumai	Control				-		
Overall	Overall	30	31	15.7 ± 18.1	11.5 ± 17.9	4.2 ± 3.1	50.5 ± 28.5
	All (mixer/burner)	2	37	23.6 ± 13.5	17.8 ± 17.3	5.8 ± 3.8	65.1 ± 36.2
	Burner			54.4	50.1	4.3	92.1
	Zircon miner			23.1	16.2	6.9	70.0
	Pit miner	1	40	4.6	1.4	3.1	31.3
	Mixer	3	32	28.5 ± 23.9	20.0 ± 29.4	8.6 ± 5.7	44.7 ± 45.0
	Traditional miner	1	40	1.9	0.2	1.7	8.9
	Shop owner	1	28	54.6	50.6	4.5	91.8
	House wife	18	30	10.7 ± 14.1	7.3 ± 13.7	3.4 ± 2.5	50.7 ± 23.7
	Kid				-		
	Control	2	26	2.8 ± 1.2	0.5 ± 0.2	2.4 ± 1.3	19.3 ± 13.7

Annex 2 - Hg data

Hg exposure that a exact Hg exposure way should be identified
THg exceeding 50 μg/g (level at which neurological symptoms would appear in the most susceptible adults)
MeHg exceeding 12 μg/g (BMDL: a benchmark-dose lower-confidence limit for maternal hair (for female of child-bearing age))
MeHg exceeding 2.3 μg/g (PTWI: a provisional tolerable weekly intake)
Person whose at least one of mercury concentrations exceeded the standard.

No	Name	Age	Sex	Job	Location	THg μg/g	MeHg μg/g	IHg μg/g	MeHg/THg %	IHg/THg %
1	Rustam effendi	56 yo	M	Burner	Aspai sebrang	20.90	8.44	12.46	40.4	59.6
2	Hadi	31 yo	M	Zircon miner	Aspai sebrang	5.62	4.91	0.70	87.5	12.5
3	Dion	23 yo	M	all (mixer/burner)	Aspai sebrang	17.08	13.48	3.59	79.0	21.0
4	Asri	37 yo	M	all	Aspai sebrang	17.78	16.83	0.95	94.7	5.3
5	Kacah (Suriansyah)	37 yo	M	all	Aspai sebrang	15.05	13.59	1.46	90.3	9.7
6	Ali	35 yo	M	all	Aspai sebrang	3.39	2.90	0.49	85.5	14.5
7	Saman	19 yo	M	all	Aspai sebrang	20.79	3.54	17.25	17.0	83.0
8	Hendra	20 yo	M	pit miner	Aspai sebrang	7.95	3.44	4.51	43.3	56.7
9	Muin	23 yo	M	all	Aspai sebrang	5.05	3.95	1.10	78.1	21.9
10	Alus	34 yo	F	Mixer	Aspai sebrang	16.67	12.50	4.18	74.9	25.1
11	Astabir	31 yo	M	all	Aspai sebrang	3.93	1.56	2.37	39.8	60.2
12	Rusmiyanti	25 yo	F	House wife	Aspai sebrang	43.37	5.36	38.01	12.4	87.6
13	Samsul	23 yo	M	Mixer	Aspai sebrang	3.70	1.37	2.33	37.1	62.9
14	Zubaidah	45 yo	F	zircon miner	Aspai sebrang	23.11	6.94	16.17	30.0	70.0
15	Anton	26 yo	M	all	Aspai sebrang	43.49	22.73	20.76	52.3	47.7
16	Juliansyah	25 yo	M	all	Aspai sebrang	5.68	3.01	2.67	53.0	47.0
17	Ohan	31 yo	M	all	Aspai sebrang	5.81	5.05	0.76	87.0	13.0
18	Kardi	24 yo	M	all	Aspai sebrang	10.46	3.38	7.07	32.3	67.7
19	Supiyan	35 yo	M	Burner	Aspai sebrang	11.73	9.37	2.36	79.9	20.1
20	Riyadi	18 yo	M	Zircon	Aspai sebrang	26.02	8.06	17.96	31.0	69.0
21	Nurbainah	20 yo	F	House wife	Aspai sebrang	5.90	4.44	1.46	75.2	24.8
22	Ibu Alipah	28 yo	F	shop owner	Aspai sebrang	54.63	4.48	50.15	8.2	91.8
23	Timah	29 yo	F	Mixer	Aspai sebrang	12.91	11.26	1.65	87.2	12.8
24	Santi	14 yo	F	Kid	Aspai sebrang	407.27	12.31	394.96	3.0	97.0
25	Yidan	55 yo	M	all	Aspai sebrang	7.80	6.37	1.43	81.7	18.3
26	Nia	24 yo	F	House wife	Aspai sebrang	13.65	6.35	7.30	46.5	53.5
27	Tris	20 yo	M	all	Aspai sebrang	39.88	15.08	24.80	37.8	62.2
28	Sundan	20 yo	M	pit miner	Aspai sebrang	2.39	1.98	0.40	83.1	16.9
29	Munir	30 yo	M	shop owner	Aspai sebrang	5.17	4.57	0.60	88.4	11.6
30	Amir	22 yo	M	shop owner	Aspai	14.91	12.37	2.55	82.9	17.1
31	Sampit	25 yo	M	Mixer	Aspai	1.58	0.54	1.03	34.5	65.5
32	Bondan	28 yo	M	pit miner	Aspai sebrang	2.10	0.88	1.22	42.0	58.0
33	Adul	18 yo	M	Zircon Minner	Aspai	4.53	2.32	2.21	51.2	48.8
34	Narsid	35 yo	M	Zircon miner	Rasau	78.97	1.68	77.29	2.1	97.9
35	Karto	30 yo	M	Zircon miner	Rasau	2.76	1.53	1.23	55.3	44.7
36	Rajemah	60 yo	F	pit miner	Rasau	10.20	3.67	6.54	35.9	64.1
37	Amat	25 yo	M	all	Rasau	3.61	1.12	2.49	31.0	69.0
38	Hj Satri	55 yo	M	Burner	Rasau	11.58	4.40	7.18	38.0	62.0
39	Sugeng	28 yo	M	burner	Rasau	1.89	1.33	0.56	70.2	29.8
40	Thomas	37 yo	M	all	Rasau	6.09	2.12	3.98	34.7	65.3
41	Asef	30 yo	M	all	Rasau	7.41	5.42	1.99	73.1	26.9
42	Ardi	22 yo	M	Burner	Rasau	3.05	1.86	1.19	61.1	38.9
43	Askan	48 yo	M	Burner	Rasau	14.59	13.89	0.71	95.1	4.9
44	M Yatim	36 yo	M	Burner	Rasau	3.45	2.74	0.72	79.3	20.7
45	Saenah	28 yo	F	House wife	Rasau	5.58	1.20	4.38	21.5	78.5
46	Satum	28 yo	F	Burner	Rasau	54.42	4.32	50.10	7.9	92.1
47	Patma sari	32 yo	F	mixer	Rasau	56.00	2.13	53.87	3.8	96.2
48	Antony	32 yo	M	Burner	Rasau	4.69	2.18	2.52	46.3	53.7
49	Ahmad Husni	36 yo	M	all	Rasau	2.35	1.48	0.87	62.8	37.2
50	Alan	34 yo	M	Burner	Rasau	5.38	3.35	2.03	62.2	37.8
51	Sumi	44 yo	F	all	Rasau	14.03	8.49	5.54	60.5	39.5
52	Sakura	40 yo	F	pit miner	Rasau	4.56	3.13	1.43	68.7	31.3
53	Ibu Dian	40 yo	F	Traditional miner	Rasau	1.92	1.74	0.17	91.1	8.9
54	Arbani	32 yo	M	Burner	Rasau	5.79	2.25	3.54	38.9	61.1
55	Ib Haji Satri	55 yo	F	Mixer	Rasau	4.19	2.66	1.53	63.4	36.6

Hg exposure that a exact Hg exposure way should be identified
THg exceeding 50 μg/g (level at which neurological symptoms would appear in the most susceptible adults)
MeHg exceeding 12μg/g (BMDL: a benchmark-dose lower-confidence limit for maternal hair (for female of child-bearing age))
MeHg exceeding 2.3μg/g (PTWI: a provisional tolerable weekly intake)
Person whose at least one of mercury concentrations exceeded the standard.

No	Name	Age	Sex	Job	Location	THg μg/g	MeHg μg/g	IHg μg/g	MeHg/THg %	IHg/THg %
56	Atun	30 yo	F	all	Rasau	33.11	3.09	30.02	9.3	90.7
57	Nurlela	37 yo	F	House wife	Sekonyer	175.99	3.51	172.48	2.0	98.0
58	Patini	35 yo	F	House wife	Sekonyer	13.25	6.69	6.56	50.5	49.5
59	Rukaiyah	35 yo	F	House wife	Sekonyer	16.44	10.71	5.73	65.2	34.8
60	Amat	14 yo	M	pit miner	Sekonyer	12.65	10.75	1.90	85.0	15.0
61	Esah	62 yo	F	House wife	Sekonyer	4.18	3.16	1.02	75.6	24.4
62	Surayah	30 yo	F	House wife	Sekonyer	4.44	2.69	1.74	60.7	39.3
63	Mrs Rusmiyati	30 yo	F	House wife	Sekonyer	52.01	2.05	49.96	3.9	96.1
64	ibu Satimah	27 yo	F	House wife	Sekonyer	5.05	3.34	1.71	66.1	33.9
65	Nursati	36 yo	F	House wife	Sekonyer	5.15	2.55	2.60	49.5	50.5
66	Sampurna	33 yo	F	House wife	Sekonyer	3.78	2.00	1.78	52.8	47.2
67	Samsu	24 yo	M	Fnpf	Sekonyer	2.92	0.94	1.98	32.3	67.7
68	Chobe	36 yo	M	control	Sekonyer	6.53	3.71	2.81	56.9	43.1
69	Tuyan	28 yo	M	control	Sekonyer	3.29	2.65	0.63	80.7	19.3
70	Baihaki	24 yo	M	control	Sekonyer	4.59	2.78	1.81	60.6	39.4
71	Unus	26 yo	M	pit miner	Sekonyer	4.07	3.48	0.59	85.4	14.6
72	Jais	45 yo	M	control	Sekonyer	13.17	12.33	0.84	93.6	6.4
73	Saliyah	37 yo	F	House wife	Sekonyer	2.76	0.56	2.20	20.2	79.8
74	Yanna	38 yo	F	House wife	Sekonyer	2.88	2.51	0.37	87.1	12.9
75	Arbain	30 yo	M	control	Sekonyer	6.81	5.36	1.45	78.7	21.3
76	Hamdah	36 yo	F	House wife	Sekonyer	5.17	4.08	1.09	79.0	21.0
77	Liyah	27 yo	F	House wife	Sekonyer	3.98	1.95	2.03	49.0	51.0
78	Isul	23 yo	M	control	Sekonyer	5.16	4.45	0.71	86.3	13.7
79	Azis	29 yo	M	Ali	Sekonyer	3.49	1.97	1.53	56.3	43.7
80	Supiyan	40 yo	M	control	Sekonyer	6.67	5.21	1.46	78.1	21.9
81	Marlina	26 yo	F	House wife	Sekonyer	2.98	1.15	1.82	38.7	61.3
82	Basuki	33 yo	M	Control	Sekonyer	2.70	1.34	1.36	49.5	50.5
83	Hadran	51 yo	M	control	Sekonyer	8.74	7.32	1.42	83.7	16.3
84	Aryadi	14 yo	M	control	Sekonyer	3.93	2.96	0.97	75.2	24.8
85	Jamaiyah	23 yo	F	House wife	Sekonyer	3.85	2.23	1.62	57.9	42.1
86	Ijah	27 yo	F	House wife	Sekonyer	2.74	2.08	0.66	75.9	24.1
87	Mahadi	38 yo	M	pit miner	Sekonyer	11.32	9.43	1.89	83.3	16.7
88	Yusran	31 yo	M	pit miner	Sekonyer	5.74	4.61	1.13	80.2	19.8
89	Suryan	35 yo	M	Control	Sekonyer	4.36	3.27	1.10	74.9	25.1
90	Kaspul	33 yo	M	control	Sekonyer	8.11	5.84	2.28	72.0	28.0
91	Rustam	35 yo	M	pit miner	Sekonyer	13.78	9.54	4.24	69.2	30.8
92	M .Arsad	53 yo	M	pit miner	Sekonyer	6.81	6.01	0.80	88.2	11.8
93	Kay Howe	57 yo	F	FNPF/ Trainer	Sekonyer	1.44	1.08	0.36	74.8	25.2
94	Hadman	24 yo	M	Mixer	Sekonyer	4.84	2.99	1.85	61.7	38.3
95	Fadli	56 yo	M	mixer	Sekonyer	6.17	4.46	1.71	72.2	27.8
96	Aris	18 yo	M	control	Sekonyer	9.62	8.62	1.00	89.6	10.4
97	Yenny F	30 yo	F	FNPF/ Trainer	Sekonyer	1.97	1.40	0.57	71.0	29.0
98	Komang	30 yo	M	FNPF	Sekonyer	0.72	0.42	0.30	58.7	41.3
99	Tini	21 yo	F	Control	Sekonyer	3.65	3.30	0.35	90.4	9.6
100	Wahyu	17 yo	M	control	Kumai	0.66	0.39	0.27	59.0	41.0
101	Nowis	18 yo	M	control	Kumai	1.01	0.42	0.60	41.2	58.8
102	Dede	16 yo	M	control	Kumai	2.25	1.97	0.29	87.2	12.8
103	Budiansyah	20 yo	M	control	Kumai	1.84	1.83	0.02	99.1	0.9
104	Rasyid	17 yo	M	control	Kumai	2.42	2.11	0.31	87.2	12.8
105	Dwi	18 yo	M	control	Kumai	2.13	1.67	0.46	78.3	21.7
	NIES Certified Reference Material. No. 13 Human Hair					4.42 ± 0.2	3.8 ± 0.4			
1	1st for THg analysis					4.29	-			
2	2nd for THg analysis					4.31	-			
3	3rd for THg analysis					4.32	-			
1	1st for MeHg analysis					-	3.61			
2	2nd for MeHg analysis					-	3.59			
3	3rd for MeHg analysis					-	3.63			

Appendix 8.Laboratory Result of the Mercury Level on the Fish Samples

PEMERINTAH PROPINSI KALIMANTAN TENGAH
DINAS KESEHATAN
BALAI LABORATORIUM KESEHATAN
PROVINSI KALIMANTAN TENGAH

Jl. Letjen. Suprapto No.1 Telpon / Fax : 3236818 / 3221106 Palangka Raya 73111

HASIL PEMERIKSAAN AIR RAKSA (Hg) PADA IKAN DAN SEDIMEN

Pengirim : Yayasan Pencinta/ Penyantun Taman Nasional (FNPF) Kab. Kobar
Asal Sampel : Biota Laut (Ikan) dan Sedimen
Lokasi Pengambilan : Sekitar Sekonyer Kab. Kobar
Sampel diambil tanggal : 26 Nopember 2006 Nama Petugas : I Gede Nyoman Antoni
Sampel diterima tanggal : 28 Nopember 2006 Nama Petugas : Liza Damayanti
Tanggal pemeriksaan : 29 Desember 2006 s/d 25 Januari 2007

No.	NAMA SAMPEL	Satuan	Metoda	Hasil	Keterangan
	I. IKAN				
1.	Ikan Bawal Hitam	mg/kg	RAMA	0.037	- Hasil ikan dalam mg/kg Berat Basah
2.	Ikan Kakap	mg/kg	RAMA	0.057	
3.	Ikan Haruan	mg/kg	RAMA	1.357	
4.	Udang	mg/kg	RAMA	ttd	- Nilai yang diijinkan untuk konsumsi ikan yang ditetapkan oleh WHO : 0,5 mg/kg Berat Basah
5.	Ikan Baung	mg/kg	RAMA	0.553	
6.	Ikan Bawal Putih	mg/kg	RAMA	0.033	
7.	Ikan Tongkol	mg/kg	RAMA	0.082	
8.	Ikan Selar	mg/kg	RAMA	0.094	
9.	Ikan Nabi Batang	mg/kg	RAMA	0.436	
10.	Ikan Sembilang	mg/kg	RAMA	ttd	
11.	Cumi cumi	mg/kg	RAMA	ttd	
12.	Ikan Runtu	mg/kg	RAMA	0.869	
13.	Kepiting	mg/kg	RAMA	0.014	
14.	Ikan Kapah	mg/kg	RAMA	0.034	
	II SEDIMEN				
1.	Tanah Sungai Sekonyer, Lokasi Aspai Sebrang	mg/kg	RAMA	0.153	- Hasil sedimen dalam mg/kg Berat Basah
2.	25 cm ½ Kolam Aspai	mg/kg	RAMA	0.106	
3.	0.0 cm Atas Aspai Sebrang	mg/kg	RAMA	0.120	
4.	50 cm Dasar Kolam Asbuk Aspai	mg/kg	RAMA	0.114	- Nilai rujukan sedimen belum kami miliki
5.	Kolam Asbuk 0,25 cm Aspai Sebrang	mg/kg	RAMA	0.104	

Keterangan :

ttd = Tidak terdeteksi
RAMA = Reduction Aeration Mercury Analyzer

Palangka Raya, 25 Januari 2007

Kepala Balai Laboratorium Kesehatan
Propinsi Kalimantan Tengah

Dr. Sugiarto Budi
Pembina Tk.I
NIP. 140144 662

KALTENG POS, Senin 26 Februari 2007

Ketika Sungai Sekonyer Tercemar Merkuri

Oleh: Drh Yenny Fildayani*)

SUNGAI Sekonyer adalah sungai pembatas antara Taman Nasional Tanjung Puting (TNTP) bagian barat dengan pemukiman penduduk di luar Taman Nasional [illegible] Sekonyer. Sungai ini adalah sumber ikan dan sumber air untuk kebutuhan MCK bagi masyarakat sekitar serta tempat rekreasi untuk wisatawan lokal maupun internasional. Selain bermanfaat [illegible] bagi manusia, Sungai Sekonyer juga menghidupi berbagai macam spesies satwa. Keragaman jenis species satwa di dalamnya antara lain arwana (Scleropages formosus), bulus, tomen, pe[illegible], dan beragam reptil [illegible] (Tomistoma schlegelii), buaya sapit, kura-kura dan labi-labi. Ada berbagai macam burung yang mengandalkan makanannya dari sungai ini. Misalnya, burung raja udang (Kingfisher), bangau storm dan berbagai mamalia yang tinggal di pinggir sungai antara lain, bekantan (Nasalis larvatus), dan monyet ekor panjang (Macaca fascicularis).

Sayangnya kualitas air Sungai Sekonyer telah menurun sehingga penduduk sekitar tidak dapat lagi memanfaatkan air sungai seperti sebelumnya. Para wisatawan juga harus menyaksikan pemandangan air sungai berwarna coklat susu keruh yang pada awalnya adalah berwarna coklat kehitaman jernih yang memukau.

Salah satu penyebab pencemaran air Sungai Sekonyer berasal dari kegiatan penambangan emas tanpa izin yang menggunakan air raksa (merkuri) sebagai pengikat emas dalam proses amalgamasi. Sedangkan kekeruhan air berasal dari kegiatan menambang yang dilakukan secara langsung di sungai (melanting). Air raksa yang tersisa dari proses amalgamasi yaitu pencampuran konsentrat tambang yang mengandung emas dengan air raksa sebagai pengikatnya, terbuang ke dalam kolam amalgamasi atau ikut ke dalam aliran air menuju ke sungai. Selain dari proses amalgamasi, air raksa juga dihasilkan dari proses pembakaran emas yang bertujuan untuk memurnikan emas, tanpa alat pembakaran yang benar air raksa akan terbuang ke udara sehingga membahayakan kesehatan manusia dan mencemari lingkungan sekitar.

Uap air raksa hasil pembakaran emas akan terbawa oleh angin dan kemudian jatuh ke tanah atau pun ke sungai. Air raksa yang jatuh ke sungai akan mengendap di dasar sungai dan akan mengalami proses perubahan bentuk menjadi *metil merkuri*, (CH3Hg) suatu zat yang lebih beracun daripada merkuri (Hg) atau air raksa itu sendiri. *Metil merkuri* akan tersimpan di dalam tubuh ikan yang ada di sungai dan ikut dalam rantai makanan. Ikan pemakan ikan lain terutama ikan berukuran besar lebih berisiko dalam pemaparan metil merkuri ke tubuh manusia karena kandungan metil merkuri akan semakin besar pada ikan berukuran besar. Dari hasil pemeriksaan kadar merkuri terhadap beberapa jenis ikan yang dibeli dari pasar ikan di Kumai, kecamatan terdekat dari Sungai Sekonyer, menunjukkan bahwa beberapa jenis ikan memiliki kandungan merkuri tinggi, seperti misalnya ikan baji batang dan ikan runtu (0,436 dan 0,860 mg/kg). Kadar maksimum yang diizinkan WHO untuk ikan konsumsi (0,5 mg/kg ikan). Sedangkan ikan yang diambil dari Sungai Sekonyer, antara lain, ikan haruan dan ikan toman. Keduanya memiliki kadar merkuri yang sangat tinggi (1,357 mg dan 0,55 mg). Ikan haruan mengandung hampir tiga kali lipat nilai maksimum. Hasil tes tersebut menunjukkan bahwa Sungai Sekonyer telah tercemari oleh merkuri. Ini tentu saja sangat merugikan masyarakat.

Pencemaran merkuri sangat merugikan masyarakat karena pada umumnya masyarakat kita adalah pengkonsumsi ikan. Dengan mengkonsumsi ikan yang tercemar merkuri, manusia dapat terpapar oleh merkuri. Paparan merkuri dalam jumlah tinggi dan jangka waktu lama dalam tubuh manusia akan mengakibatkan keracunan merkuri, terutama ibu hamil dan anak-anak.

Berbagai bentuk keracunan merkuri antara lain adalah kerusakan syaraf yang berupa turunnya reflek, kesulitan berjalan, kejang-kejang, kehilangan pendengaran, rusaknya penglihatan dan dapat berakhir dengan kematian. Generasi penerus kita juga akan terpengaruh oleh paparan merkuri karena merkuri akan [illegible] ngan anak janin dan mengakibatkan perkembangan otak anak-anak, karena merkuri mengakibatkan kerusakan syaraf yang permanen sifatnya.

Sungai Sekonyer hanyalah satu dari berbagai sungai di Indonesia yang tercemar oleh merkuri. Sungai Kahayan, Kalimantan Tengah dan Sungai Tapian, Sulawesi Utara diduga juga telah banyak tercemar merkuri karena banyaknya penambang emas yang beroperasi di sekitar sungai-sungai ini. Dilaporkan bahwa hanya dari satu tempat penambangan terdapat sekitar 2.000 penambang emas ilegal di tempat ini. UNIDO (United Nation of Industrial and Development Organization) memperkirakan sekitar 150 ton merkuri terbuang ke lingkungan setiap tahun di Indonesia. ( )

*) Manager Proyek Merkuri, Yayasan Pecinta Taman Nasional/Friends of the National Park Foundation (FNPF)

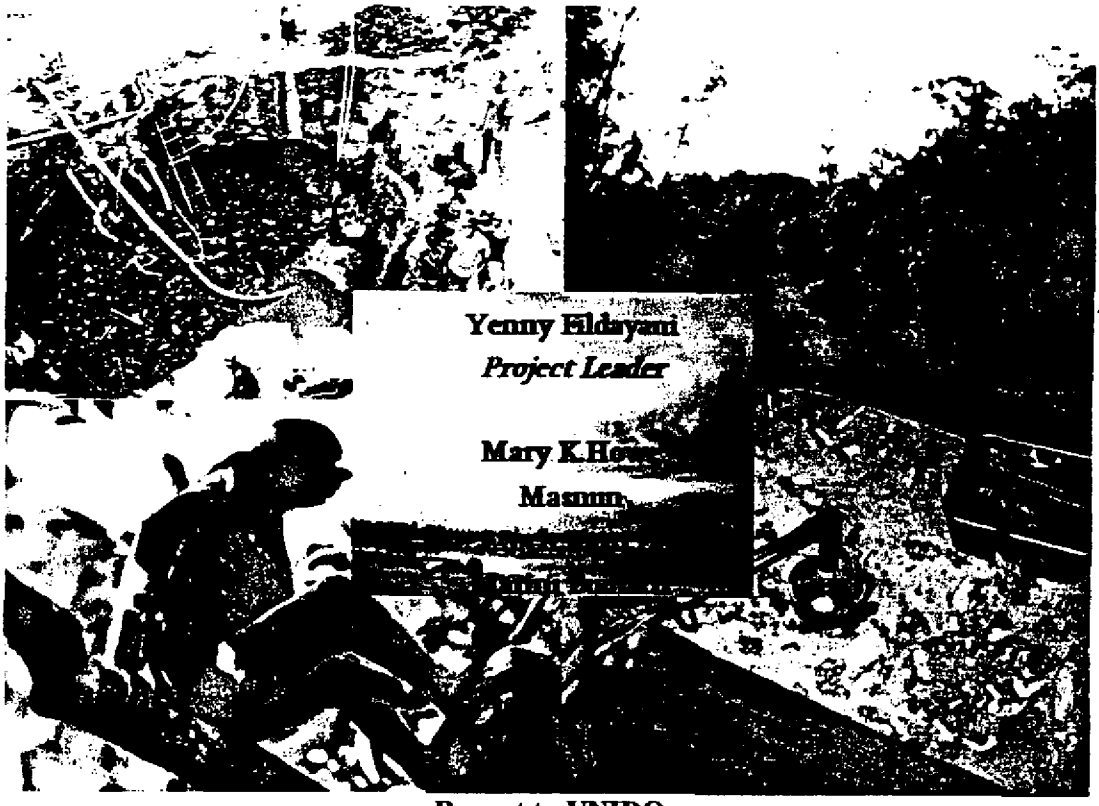
Ketika Sungai Sekonyer Tercemar Merkuri

23406
(2 of 2)

FNPF

Friends of the National Parks Foundation

Raising General Community Awareness on the Health Risks of Mercury and Introducing Cleaner Technology for Gold Recovery along the Sekonyer River, Kota Waringin Barat District, Central Kalimantan, Indonesia



Report to UNIDO

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

Project No.16001070 - EG/GLO/01G34.

FNPF BORNEO
Report to UNIDO

Tanggal	Ref	No Bukti	Description	Kode B	Kode C	Project	Kategory	Debet		Kredit	Saldo
05-Sep	Receipt	001	Fish Samples	100	592	Raising Awareness and Inf	Biaya Analisis (Laboratorium dll)		Rp	200.000	
09-Sep	Receipt	001	Panning	200	538,05	Demonstration of Cleaner T	General Equipment		Rp	65.000	
12-Sep	Receipt	001	Snacks for Training in Sekonyer	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	50.000	
12-Sep	Receipt	002	Bowls, frying pan (for Retorts)	200	538,05	Demonstration of Cleaner T	General Equipment		Rp	90.000	
16-Sep	Receipt	002	Car Rental (to SMA 2 Pbun)	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	225.000	
16-Sep	Receipt	002	Fuel 10 ltr	100	521	Raising Awareness and Inf	Fuel		Rp	50.000	
16-Sep	Receipt	002	Snacks (50)+ drinks for students	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	80.000	
16-Sep	Receipt	003	Car Rental (to SMA 2 Pbun)	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	225.000	
16-Sep	Receipt	003	Meals	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	50.000	
17-Sep	Receipt	003	Fuel 10 ltr	100	521	Raising Awareness and Inf	Fuel		Rp	50.000	
18-Sep	Receipt	003	Banner	100	573	Raising Awareness and Inf	Information & Publication Printing fee		Rp	175.000	
19-Sep	Receipt	004	Honor Ria/Midwive	100	503	Raising Awareness and Inf	Incentive / Honorarium		Rp	150.000	
19-Sep	Receipt	004	Charter speedboat to Tanjung Harapan	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	125.000	
20-Sep	Receipt	004	Charter speedboat to Tanjung Harapan/return	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	200.000	
20-Sep	Receipt	004	Car Rental (toSMA 2+Balai TNTP)	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	225.000	
20-Sep	Receipt	004	Charter motorbike to Mr.Supian's house/miner	300	520,03	Develop Partnership and C	Taxi, car rental, bus, local transport		Rp	25.000	
30-Sep	Invoice	006	Staff FNPF- GMP Salary	400	500	Project management and c	Salary expense for local staff		Rp	5.000.000	
30-Sep	Invoice	005	Field Support & Overhead Alocation to FNPF		546	#N/A	General Overhead & Office Allocation		Rp	1.250.000	
30-Sep	Invoice	007	Telecomunications	400	549	Project management and c	Phone expense		Rp	500.000	
04-Okt	Receipt	005	Voucher Handphone 100000	100	549	Raising Awareness and Inf	Phone expense		Rp	98.000	
04-Okt	Receipt	005	Meal in Aspai	200	526	Demonstration of Cleaner T	Meals & Provisions		Rp	45.000	
05-Okt	Receipt	005	Honor Ria /Midwive	100	503	Raising Awareness and Inf	Incentive / Honorarium		Rp	150.000	
16-Okt	Bank Note	006	Transfer to UNIDO (Booklet GMP)	100	573	Raising Awareness and Inf	Information & Publication Printing fee		Rp	2.100.000	
18-Okt	Receipt	006	Drawing Pencil 1 dozen	100	554	Raising Awareness and Inf	Stationery		Rp	39.000	
18-Okt	Receipt	006	scan + print Absent	400	554	Project management and c	Stationery		Rp	20.000	
19-Okt	Receipt	006	Plastic for Hair Samples	100	592	Raising Awareness and Inf	Biaya Analisis (Laboratorium dll)		Rp	12.000	
19-Okt	Receipt	007	Photo copy	100	555	Raising Awareness and Inf	Photocopy		Rp	33.000	
19-Okt	Receipt	007	1 box pens, books	100	554	Raising Awareness and Inf	Stationery		Rp	66.000	
19-Okt	Receipt	007	I pack plastic	100	554	Raising Awareness and Inf	Stationery		Rp	2.500	
19-Okt	Receipt	008	Charter speedboat Tanjung harapan	200	520,03	Demonstration of Cleaner T	Taxi, car rental, bus, local transport		Rp	125.000	
20-Okt	Receipt	008	Car Rental (to Eduation Departement Office)	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	225.000	
20-Okt	Receipt	008	Meal	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	35.000	
20-Okt	Receipt	009	Charter speedboat ke rasau	200	520,03	Demonstration of Cleaner T	Taxi, car rental, bus, local transport		Rp	400.000	
29-Okt	Receipt	009	Car Rental to Pangkalan Bun	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	225.000	
30-Okt	Receipt	009	Charter speedboat to Rasau	200	520,03	Demonstration of Cleaner T	Taxi, car rental, bus, local transport		Rp	400.000	
30-Okt	Receipt	010	5 cm Pipe, hard ware (klem)	200	538,05	Demonstration of Cleaner T	General Equipment		Rp	105.000	
30-Okt	Receipt	010	Kitchen Bowls, frying pan	200	538,05	Demonstration of Cleaner T	General Equipment		Rp	85.000	
31-Okt	Receipt	011	Meal in Rasau	200	526	Demonstration of Cleaner T	Meals & Provisions		Rp	38.000	
31-Okt	Receipt	011	Drinks (Mineral water, coca-cola)	200	526	Demonstration of Cleaner T	Meals & Provisions		Rp	19.000	
31-Okt	Receipt	011	Meals (Kasri + Kay)	200	526	Demonstration of Cleaner T	Meals & Provisions		Rp	40.000	
31-Okt	Invoice	009	Staff Salary (FNPF-GMP)	400	500	Project management and c	Salary expense for local staff		Rp	5.000.000	
31-Okt	Invoice	008	Field Support & Overhead Alocation to FNPF		546	#N/A	General Overhead & Office Allocation		Rp	1.250.000	
31-Okt	Invoice	010	Telecomunications	400	549	Project management and c	Phone expense		Rp	500.000	
01-Nop	Receipt	012	charter speed to Aspai	200	520,03	Demonstration of Cleaner T	Taxi, car rental, bus, local transport		Rp	400.000	
01-Nop	Receipt	012	Drinks in Aspai	200	526	Demonstration of Cleaner T	Meals & Provisions		Rp	50.000	
03-Nop	Receipt	012	Bensin	100	521	Raising Awareness and Inf	Fuel		Rp	10.000	
03-Nop	Receipt	012	Charter motorbike to SMA1 Kumai	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	40.000	
03-Nop	Receipt	012	Fuel	100	522	Raising Awareness and Inf	Accomodation expense		Rp	10.000	

FNPF BORNEO
Report to UNIDO

Tanggal	Ref	No Bukti	Description	Kode B	Kode C	Project	Kategory	Debet		Kredit	Saldo
03-Nop	Receipt	013	Snacks for students	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	20.000	
03-Nop	Receipt	013	Drinks (Gogo) for Drama/students practise	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	20.000	
03-Nop	Receipt	013	charter boat	200	520,03	Demonstration of Cleaner T	Taxi, car rental, bus, local transport		Rp	100.000	
04-Nop	Receipt	013	Charter motorbike to P Bun	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	40.000	
04-Nop	Receipt	014	Gogo drink + Roti coklat	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	50.000	
05-Nop	Receipt	014	Meals for students (practise Drama)	300	526	Develop Partnership and C	Meals & Provisions		Rp	60.000	
06-Nop	Receipt	014	Boat to Tanjung Harapan	300	520,03	Develop Partnership and C	Taxi, car rental, bus, local transport		Rp	100.000	
06-Nop	Receipt	015	Bamboo, rope, wood for Puppet show	100	577	Raising Awareness and Inf	Exhibition expense		Rp	385.000	
07-Nop	Receipt	015	Car Rental to Balai TPNP	300	520,03	Develop Partnership and C	Taxi, car rental, bus, local transport		Rp	225.000	
07-Nop	Receipt	015	Meals	300	526	Develop Partnership and C	Meals & Provisions		Rp	35.000	
11-Nop	Receipt	016	Talk show Radio Primadona	100	576	Raising Awareness and Inf	Mass media expense		Rp	150.000	
11-Nop	Receipt	016	Radio Quiz Prize	100	576	Raising Awareness and Inf	Mass media expense		Rp	80.000	
11-Nop	Receipt	017	Books	100	554	Raising Awareness and Inf	Stationery		Rp	31.500	
21-Nop	Receipt	017	Car Rental to P. Bun	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	225.000	
21-Nop	Receipt	018	voucer Handphone	400	549	Project management and c	Phone expense		Rp	98.000	
21-Nop	Receipt	018	Drawing books	100	554	Raising Awareness and Inf	Stationery		Rp	10.000	
22-Nop	Receipt	018	Books	100	554	Raising Awareness and Inf	Stationery		Rp	26.500	
22-Nop	Receipt	018	Paper	200	554	Demonstration of Cleaner T	Stationery		Rp	8.500	
22-Nop	Receipt	019	Fume Hood retod	200	538,05	Demonstration of Cleaner T	General Equipment		Rp	1.400.000	
23-Nop	Receipt	019	Charter speedboat to Sekonyer	200	520,03	Demonstration of Cleaner T	Taxi, car rental, bus, local transport		Rp	100.000	
23-Nop	Receipt	020	40 meals for ASPAI Training	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	400.000	
23-Nop	Receipt	020	Snacks and Drink	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	75.000	
23-Nop	Receipt	020	Charter speedboat to Tanjung Harapan	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	100.000	
24-Nop	Receipt	020	Charter speedboat Kumai - Aspai	200	520,03	Demonstration of Cleaner T	Taxi, car rental, bus, local transport		Rp	400.000	
24-Nop	Receipt	021	Fish samples	100	592	Raising Awareness and Inf	Biaya Analisis (Laboratorium dll)		Rp	85.000	
24-Nop	Receipt	021	Paper and Envelope	400	554	Project management and c	Stationery		Rp	14.000	
25-Nop	Receipt	021	50 donuts + drinks	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	75.000	
25-Nop	Receipt	021	Fish samples	100	592	Raising Awareness and Inf	Biaya Analisis (Laboratorium dll)		Rp	27.000	
25-Nop	Receipt	022	Fuel	100	521	Raising Awareness and Inf	Fuel		Rp	50.000	
25-Nop	Receipt	022	Car Rental	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	225.000	
25-Nop	Receipt	022	Meals	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	25.000	
26-Nop	Receipt	022	Car rental to Pangkalan Bun Gold shops	200	520,03	Demonstration of Cleaner T	Taxi, car rental, bus, local transport		Rp	225.000	
26-Nop	Receipt	023	Meals	200	526	Demonstration of Cleaner T	Meals & Provisions		Rp	35.000	
27-Nop	Receipt	023	Fish samples	100	592	Raising Awareness and Inf	Biaya Analisis (Laboratorium dll)		Rp	27.000	
27-Nop	Receipt	024	50 donuts +drinks	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	75.000	
27-Nop	Receipt	024	Charter boat Kumai - Bedaun	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	150.000	
27-Nop	Receipt	024	Charter 3 motor bikes to Bedaun school	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	105.000	
27-Nop	Receipt	024	Coolbox + rope (tali tampar)	100	538,05	Raising Awareness and Inf	General Equipment		Rp	65.000	
27-Nop	Receipt	025	Charter 3 motor bikes from SDN Bedaun to hart	100	520,03	Raising Awareness and Inf	taxi, car rental, bus, local transport		Rp	105.000	
27-Nop	Receipt	025	Cool Box	100	538,05	Raising Awareness and Inf	General Equipment		Rp	14.000	
28-Nop	Receipt	025	Farmer Hat, etc (Drama Supplies)	100	538,05	Raising Awareness and Inf	General Equipment		Rp	75.000	
28-Nop	Receipt	025	Fish Samples	100	553	Raising Awareness and Inf	Courier expense		Rp	150.000	
28-Nop	Receipt	026	Rent a car to SMA 1 Pangkalan Bun	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	225.000	
28-Nop	Receipt	027	Snacks and Drink	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	75.000	
28-Nop	Receipt	027	Fuel 20 lt	100	521	Raising Awareness and Inf	Fuel		Rp	100.000	
28-Nop	Receipt	027	Fuel	100	521	Raising Awareness and Inf	Fuel		Rp	50.000	
28-Nop	Receipt	027	Adhesive Tape	100	538,05	Raising Awareness and Inf	General Equipment		Rp	10.000	
28-Nop	Receipt	028	Star Cargo /fish sampling	100	553	Raising Awareness and Inf	Courier expense		Rp	87.500	
28-Nop	Receipt	028	Meals	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	56.000	
29-Nop	Receipt	029	Rent a motor bike	300	520,03	Develop Partnership and C	Taxi, car rental, bus, local transport		Rp	225.000	
29-Nop	Receipt	029	30 meals for Training in Balai TNTP	300	526	Develop Partnership and C	Meals & Provisions		Rp	40.000	
29-Nop	Receipt	029	Biscuits	300	526	Develop Partnership and C	Meals & Provisions		Rp	450.000	

FNPF BORNEO
Report to UNIDO

Tanggal	Ref	No Bukti	Description	Kode B	Kode C	Project	Kategory	Debet	Kredit	Saldo
29-Nop	Receipt	029	Pens	300	554	Develop Partnership and C	Stationery	Rp	50.000	
29-Nop	Receipt	030	Fuel	300	521	Develop Partnership and C	Fuel	Rp	178.000	
29-Nop	Receipt	060	10lt Fuel	300	521	Develop Partnership and C	Fuel	Rp	30.000	
29-Nop	Receipt	054	Rent pick up to Balai TPNP	300	520,03	Develop Partnership and C	Taxi, car rental, bus, local transport	Rp	50.000	
30-Nop	Receipt	061	Computer Ink	300	554	Develop Partnership and C	Stationery	Rp	70.000	
30-Nop	Invoice	012	Staff Salary	400	500	Project management and c	Salary expense for local staff	Rp	5.000.000	
30-Nop	Invoice	011	Field Support & Overhead Alocation to FNPF		546	#N/A	General Overhead & Office Allocation	Rp	1.250.000	
30-Nop	Invoice	013	Telecomunications	400	549	Project management and c	Phone expense	Rp	500.000	
01-Des	Receipt	031	1 can Aril for Amalgamation drum	200	546	Demonstration of Cleaner T	General Overhead & Office Allocation	Rp	92.000	
02-Des	Receipt	031	Mop stick for amalgamation drum	200	538,05	Demonstration of Cleaner T	General Equipment	Rp	35.000	
05-Des	Receipt	031	Battery duracell 9 volt	200	546	Demonstration of Cleaner T	General Overhead & Office Allocation	Rp	20.000	
05-Des	Receipt	032	CDs blank gtpro	300	554	Develop Partnership and C	Stationery	Rp	25.000	
07-Des	Receipt	032	50 eggs + 20 kg sugar	100	526	Raising Awareness and Inf	Meals & Provisions	Rp	190.000	
07-Des	Receipt	032	20 kg suger + 1 box of Carnation milk	100	526	Raising Awareness and Inf	Meals & Provisions	Rp	347.000	
07-Des	Receipt	033	Chater motor bike to Health Centre	300	520,03	Develop Partnership and C	Taxi, car rental, bus, local transport	Rp	35.000	
11-Des	Receipt	033	Rubber Hand gloves	100	538,05	Raising Awareness and Inf	General Equipment	Rp	20.000	
15-Des	Receipt	033	Eliza kit/Testosterone Elisa 96 wells quality	100	592	Raising Awareness and Inf	Biaya Analisis (Laboratorium dll)	Rp	3.000.000	
15-Des	Receipt	034	Fauzi Retort (2pcs)	200	538,05	Demonstration of Cleaner T	General Equipment	Rp	615.000	
17-Des	Receipt	034	Car Rental to Primadona Radio Station	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport	Rp	225.000	
18-Des	Receipt	034	Flight ticket Pangkalan Bun -Semarang/return	100	520,01	Raising Awareness and Inf	Airfare, ship, and train	Rp	1.262.000	
20-Des	Receipt	034	Bus ticket Semarang -Yogya	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport	Rp	30.000	
20-Des	Receipt	035	Passanger coupon	100	520,01	Raising Awareness and Inf	Airfare, ship, and train	Rp	6.000	
20-Des	Receipt	035	Airport tax	100	520,01	Raising Awareness and Inf	Airfare, ship, and train	Rp	25.000	
20-Des	Receipt	035	Hand Gloves	200	592	Demonstration of Cleaner T	Biaya Analisis (Laboratorium dll)	Rp	68.000	
20-Des	Receipt	036	Taxi airport	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport	Rp	40.000	
21-Des	Receipt	036	Rent a car to SMKN 1Pangkalan Bun	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport	Rp	225.000	
21-Des	Invoice	036	Rental LCD Proyektor	100	577	Raising Awareness and Inf	Exhibition expense	Rp	200.000	
21-Des	Receipt	037	Snacks+drinks for students	100	526	Raising Awareness and Inf	Meals & Provisions	Rp	80.000	
21-Des	Receipt	037	Meals	100	526	Raising Awareness and Inf	Meals & Provisions	Rp	49.000	
21-Des	Receipt	037	Rent a car to SMKN 3Pangkalan Bun	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport	Rp	225.000	
21-Des	Receipt	037	Fee laboratorim for analysis	100	592	Raising Awareness and Inf	Biaya Analisis (Laboratorium dll)	Rp	300.000	
22-Des	Receipt	038	Snacks+drinks for students	100	526	Raising Awareness and Inf	Meals & Provisions	Rp	80.000	
22-Des	Receipt	038	Meals	100	526	Raising Awareness and Inf	Meals & Provisions	Rp	45.000	
22-Des	Invoice	038	Rental LCD Proyektor	100	577	Raising Awareness and Inf	Exhibition expense	Rp	200.000	
30-Des	Receipt	038	Rent a car to SMAN3 Pangkalan Bun	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport	Rp	225.000	
30-Des	Receipt	039	Snacks+drinks for students	100	526	Raising Awareness and Inf	Meals & Provisions	Rp	80.000	
30-Des	Receipt	039	Meals	100	526	Raising Awareness and Inf	Meals & Provisions	Rp	45.000	
30-Des	Invoice	017	Rental LCD Proyektor	100	577	Raising Awareness and Inf	Exhibition expense	Rp	200.000	
30-Des	Invoice	015	Staff Salary	400	500	Project management and c	Salary expense for local staff	Rp	5.000.000	
30-Des	Invoice	014	Field Support & Overhead Alocation to FNPF		546	#N/A	General Overhead & Office Allocation	Rp	1.250.000	
30-Des	Invoice	016	Telecomunications	400	549	Project management and c	Phone expense	Rp	500.000	
04-Jan	Receipt	040	Honor Ria /Midwive	200	503	Demonstration of Cleaner T	Incentive / Honorarium	Rp	200.000	
10-Jan	Receipt	040	Voucher Hand Phone	400	549	Project management and c	Phone expense	Rp	97.000	
11-Jan	Receipt	040	Car Rental	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport	Rp	225.000	
12-Jan	Receipt	040	10 liter Fuel	200	521	Demonstration of Cleaner T	Fuel	Rp	45.000	
17-Jan	Receipt	041	Document/mail	400	553	Project management and c	Courier expense	Rp	20.200	
17-Jan	Receipt	041	T-SHIRT/Gift for Radio Quiz (2pcs)	100	576	Raising Awareness and Inf	Mass media expense	Rp	160.000	
18-Jan	Receipt	041	Document /mail	400	553	Project management and c	Courier expense	Rp	202.000	
18-Jan	Receipt	042	Transport Document to Denpasar to UNIDO Jak	400	553	Project management and c	Courier expense	Rp	15.000	
19-Jan	Receipt	043	Charter motorbike to Health Departement	300	520,03	Develop Partnership and C	Taxi, car rental, bus, local transport	Rp	40.000	

FNPF BORNEO
Report to UNIDO

Tanggal	Ref	No Bukti	Description	Kode B	Kode C	Project	Kategory	Debet		Kredit	Saldo
19-Jan	Receipt	043	Meal	300	526	Develop Partnership and C	Meals & Provisions		Rp	15.500	
19-Jan	Receipt	043	Hammer, chainsaw	200	538,05	Demonstration of Cleaner T	General Equipment		Rp	127.000	
21-Jan	Receipt	044	Drawing books+pencils	100	554	Raising Awareness and Inf	Stationery		Rp	69.000	
22-Jan	Receipt	044	Rent a motorbike to SDN Sidorejo 1 PBun	100	502,3	Raising Awareness and Inf	#N/A		Rp	40.000	
23-Jan	Receipt	044	Rental car to gold shops	200	520,03	Demonstration of Cleaner T	Taxi, car rental, bus, local transport		Rp	225.000	
23-Jan	Receipt	044	Document/ mail	100	553	Raising Awareness and Inf	Courier expense		Rp	20.200	
23-Jan	Receipt	045	4 ltr bensin utk unido	100	521	Raising Awareness and Inf	Fuel		Rp	20.000	
24-Jan	Receipt	045	Rent a car to SDN1 Sidorejo P Bun	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	225.000	
25-Jan	Receipt	045	2 gr Gold	200	546	Demonstration of Cleaner T	General Overhead & Office Allocation		Rp	320.000	
25-Jan	Receipt	045	charter speed Kumai- Aspai utk unido	200	520,03	Demonstration of Cleaner T	Taxi, car rental, bus, local transport		Rp	400.000	
25-Jan	Receipt	046	1 box of Mineral Water	200	526	Demonstration of Cleaner T	Meals & Provisions		Rp	13.000	
25-Jan	Receipt	046	Donuts for the students (60)	200	526	Demonstration of Cleaner T	Meals & Provisions		Rp	60.000	
25-Jan	Receipt	047	Plastic Box	200	538,05	Demonstration of Cleaner T	General Equipment		Rp	20.000	
28-Jan	Receipt	047	Sending Hair Sample to Japan	100	592	Raising Awareness and Inf	Biaya Analisis (Laboratorium dll)		Rp	444.500	
29-Jan	Receipt	048	Crayons	100	554	Raising Awareness and Inf	Stationery		Rp	98.500	
29-Jan	Receipt	048	Drum, pipe, for soil sampling	100	538,05	Raising Awareness and Inf	General Equipment		Rp	175.000	
30-Jan	Receipt	049	Rent a car to SMPN1 Kumai	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	225.000	
30-Jan	Invoice	002	Staff Salary	400	500	Project management and c	Salary expense for local staff		Rp	5.000.000	
30-Jan	Receipt	033	Drinks for the students	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	73.500	
30-Jan	Receipt	034	70 pcs Donuts	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	70.000	
30-Jan	Invoice	001	Field Support & Overhead Alocation to FNPF		546	#N/A	General Overhead & Office Allocation		Rp	1.250.000	
30-Jan	Receipt	003	1 Voucher Handphone	100	549	Raising Awareness and Inf	Phone expense		Rp	98.000	
30-Jan	Invoice	003	Telecomunications	400	549	Project management and c	Phone expense		Rp	500.000	
31-Jan	Receipt	038	Car Rental	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	225.000	
31-Jan	Receipt	007	Laboratorium Analysis Fee	100	592	Raising Awareness and Inf	Biaya Analisis (Laboratorium dll)		Rp	1.026.000	
01-Feb	Receipt	050	Paper	100	554	Raising Awareness and Inf	Stationery		Rp	28.000	
02-Feb	Receipt	050	Mail /Document	100	553	Raising Awareness and Inf	Courier expense		Rp	17.000	
03-Feb	Receipt	051	200 pages Photo copy	100	555	Raising Awareness and Inf	Photocopy		Rp	40.000	
04-Feb	Receipt	051	30 boxes Meals	200	526	Demonstration of Cleaner T	Meals & Provisions		Rp	300.000	
09-Feb	Receipt	051	Meals	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	18.000	
09-Feb	Receipt	051	T-shirt /Prize for Quiz (2pcs)	100	576	Raising Awareness and Inf	Mass media expense		Rp	160.000	
09-Feb	Receipt	052	Car Rental to Pangkalan Bun	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	225.000	
13-Feb	Receipt	052	Charter speedboat Kumai-Rasau	200	520,03	Demonstration of Cleaner T	Taxi, car rental, bus, local transport		Rp	400.000	
14-Feb	Receipt	052	1 Voucher HandPhone	400	549	Project management and c	Phone expense		Rp	98.000	
15-Feb	Receipt	053	10 Drawing books and pencils	100	554	Raising Awareness and Inf	Stationery		Rp	19.000	
15-Feb	Receipt	053	85 donuts for the students	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	85.000	
15-Feb	Receipt	053	2 boxes of Mineral Water	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	28.000	
15-Feb	Receipt	053	80 pcs Donuts	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	100.000	
15-Feb	Receipt	054	Car Rental to SDN Mendawai Pangkalan Bun	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	225.000	
15-Feb	Receipt	054	Meals	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	52.500	
16-Feb	Receipt	054	Rent a pick up car to SDN Candi I	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	100.000	
16-Feb	Receipt	054	50 pcs Snacks for students	100	526	Raising Awareness and Inf	Meals & Provisions		Rp	75.000	
16-Feb	Receipt	055	Drawing books	100	554	Raising Awareness and Inf	Stationery		Rp	7.500	
22-Feb	Receipt	055	Sending soil samples	100	592	Raising Awareness and Inf	Biaya Analisis (Laboratorium dll)		Rp	25.000	
24-Feb	Receipt	055	1 roll Rope	100	546	Raising Awareness and Inf	General Overhead & Office Allocation		Rp	12.000	
27-Feb	Receipt	056	Car Rental to P Bun to Bapedalda Office	300	520,03	Develop Partnership and C	Taxi, car rental, bus, local transport		Rp	225.000	
27-Feb	Receipt	056	Meals	300	526	Develop Partnership and C	Meals & Provisions		Rp	22.500	
28-Feb	Invoice	008	Design and Printed Brosur FNPF -GMP	100	573	Raising Awareness and Inf	Information & Publication Printing fee		Rp	6.500.000	
28-Feb	Invoice	007	Design and Printed Posters	100	572	Raising Awareness and Inf	Brochure and design fee		Rp	500.000	
28-Feb	Invoice	005	Staff salary	400	500	Project management and c	Salary expense for local staff		Rp	5.000.000	
28-Feb	Receipt	056	Rent a car to Radio station	100	520,03	Raising Awareness and Inf	Taxi, car rental, bus, local transport		Rp	225.000	

FNPF BORNEO
Report to UNIDO

Tanggal	Ref	No Bukti	Description	Kode B	Kode C	Project	Kategory	Debet		Kredit	Saldo
28-Feb	Receipt	057	Radio/Hadiah Quiz	100	576	Raising Awareness and Infr	Mass media expense		Rp	50.000	
28-Feb	Invoice	004	Field Support & Overhead Alocation to FNPF		546	#N/A	General Overhead & Office Allocation		Rp	1.250.000	
28-Feb	Receipt	030	T-shirt for Radio Quiz Prize (2pcs)	100	576	Raising Awareness and Infr	Mass media expense		Rp	160.000	
28-Feb	Invoice	006	Telecomunications	400	549	Project management and c	Phone expense		Rp	500.000	
03-Mar	Receipt	057	Talk show/ Radio Primadona	100	576	Raising Awareness and Infr	Mass media expense		Rp	100.000	
30-Mar	Invoice	009	Final Report	500	573	Final Report	Information & Publication Printing fee		Rp	5.600.000	
							Saldo Akhir	**Rp**	-	**Rp 82.803.400**	
			TOTAL				**#N/A**	**Rp**	-	**Rp 82.803.400**	**Rp (82.803.400)**
								Rp	-	Rp 83.003.400	**Rp (82.803.400)**
											Rp (82.870.400)

Tuan
Toko ..... FMPF .....

o. ______

NAMA BARANG		JUMLAH
Ikan Telong		25.000,-
Tenggiri		30 000,-
Sulung sungai		15 000,-
Tunda		30 000,-
Kakap Merah		36 000,-
Udang Kecil		20 000,-
Udang Besar		30.000,-
Cool Box		19.000,-

ERIMA PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan. Jumlah Rp. 200.000,-

Hormat kami,

No.
Telah terima dari: FMPF.
Uang Sejumlah: Seratus [illegible] Rupiah
Untuk Pembayaran: Honor pegawai lomba, pagandu Balet [illegible] Uks & Mercury Program
Kuwai, 09 september [illegible]
Rp. 150.000

..... 9 - 9 ..... 20 06
Tuan
Toko

No. ______

NAMA BARANG	HARGA	JUMLAH
Gj Bulang		6500

rima PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan. Jumlah Rp. 6500

Hormat kami,

351

..... 20 .....
Tuan
Toko 12/9 06

NOTA NO. Clez.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
2 Kg	Kacang Hijau		19.000
1	Cela merah		6.000
	Cela putih		19.000
			44.000
	Kelapa 3 bh		6.000
			50.000

TANDA TERIMA PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan. Jumlah Rp.

Hormat kami,

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	Wajan		35.000,-
	Mangkok K Stainless steel		20.000,-
	" " B -"-		35.000,-
		Jumlah Rp.	90.000,-

Tanda Terima

Hormat kami,

No.
Telah terima dari: Ei-PF
Uang sejumlah: dua ratus [illegible] ribu rupiah
Untuk pembayaran: charter mobil ke SMA 2 P. Bun

Kumai, 16 Sept 06

Rp. [illegible]

SPBU 64-0404 TELP. (0532) 21302
KUMAI

BON KONTAN

10 LTR PREMIUM Rp. 50.000
LTR CAMPURAN Rp.
LTR SOLAR Rp.
LTR OLIE SAE Rp.
ACCU/ZUUR/M BEMA/GEMUK Rp.

KUMAI, 16 Sept 2006

TERIMA KASIH ATAS KUNJUNGAN ANDA.

16-9 2006

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
50	Donat		50.000,-
2 dos	Minuman aqua		30.000,-

TANDA TERIMA

PERHATIAN: Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan.

Jumlah Rp. 80.000,-

Hormat kami,

No.

Telah terima dari: Zenny

Uang sejumlah: Dua ratus dua puluh lima ribu rupiah

Untuk pembayaran: charter mobil ke sekolah SMA N 2 Pangkalan Bun

Kumai 16-Sep-06

Rp. 225.000,-

Alin

TELER AYU MISBAR TELP. KELURAHAN BARU

Tgl. 16 - 9 2006

Tuan
Toko

A No

NAMA BARANG	Harga	Jumlah Uang
Nasi Putih	3000	15000,-
Mie Goreng	6000	18000,-
Udang Msk Kecap		13000,-
Es Teh		4000,-

Terima

BARANG2 YANG SUDAH DIBELI TIDAK DAPAT DI-KEMBALIKAN, KECUALI ADA PERJANJIAN

JUMLAH Rp. 50.000,-

PANJUNG
(0532) 21382

AN

10 lt ... 50.000,-

... 50.000,-

17 - 9 2006

ANDA

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18 Sept 06

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
1	Spanduk FNPF - UNIDO		175.000,-

Jumlah Rp. 175.000,-

Tanda Terima

Hormat kami,

No. ____________

Telah terima dari ____________

Uang sejumlah Seratus dua puluh lima ribu rupiah

Untuk pembayaran charter speed boat ke Tanjung Harapan

Kumai 19 Sep 06

Rp. 125.000,-

Esling

No. ____________

Telah terima dari EMPF

Uang sejumlah Dua ratus ribu rupiah

Untuk pembayaran Rental speed Boat ke tanjung Harapan

Kumai 20 sep. 06

Rp. 200.000,-

Marrani

No. ____________

Telah terima dari EMPF

Uang sejumlah Dua ratus dua puluh lima ribu rupiah

Untuk pembayaran charter mobil ke SMA 2 + Balai Taman Nasional Tanjung Puting

Kumai 20 sep. 06

Rp. 225.000,-

Ali

No. ____________

Telah terima dari Yonny

Uang sejumlah dua puluh lima ribu rupiah

Untuk pembayaran Ojek ke Kumai Hulu (Bp. Dipo) 1/2 hari

20-9-2006

Rp. 25.000,-

Tonny

.... 20 ..

Tuan/Toko Yenny

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	Voucher Simpati 100		Rp. 98.000,-

TANDA TERIMA PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan.

Jumlah Rp. 98.000,-

Hormat kami,

.... 20 ..

Tuan/Toko Yenny

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
3	Mi Rebus	5000,-	Rp. 15.000,-
3	Es Campur	4000	Rp. 12.000,-
3	Aqua Besar	4000	Rp. 12.000
1	Gabin		Rp. 6.000,-

TANDA TERIMA PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan.

Jumlah Rp. 45.000

Hormat kami,

Mafishi

No. ______

Telah terima dari EMPF

Uang sejumlah Seratus lima puluh ribu rupiah

Untuk pembayaran Honor Ria untuk UKS, Posyandu balita / anak-anak

Ka-Seponyer 05-10-06

Rp. 150.000,

Ria Kumala Sari

ANK MANDIRI

FORMULIR SETORAN
Deposit Form

CABANG / *Branch* ....

TANGGAL / *Date* 16 - Okt - 2006

HARAP DITULIS DENGAN HURUF CETAK / *Fill in with Block Letters*

VALIDASI
```
05123 0312355   97 16/10/2006 11:06:40 AM 2111
CASH IDR 2.102.500.00 DR
128-00-0446417-5 BUDI SUSILORINI IDR 2.100.000.00 CR
IDR 2.500.00 1.0000000 1.0000000
YENNY
TANGGAL EFEKTIF 16/10/2006
```

MATA UANG / *Currency*: RUPIAH / *Local Currency* — VALUTA ASING / *Foreign Currency*

JENIS SETORAN / *Deposite Type*: TUNAI / *Cash* — WARKAT SENDIRI / *Bank Mandiri's Cheque* — WARKAT BANK LAIN / *Others bank's Cheque*

NAMA PEMILIK REKENING / *Name of Account Holder*: Budi Susilorini

ALAMAT & NO. TELP. PENYETOR / *Depositor's Address & phone Number*: ....

JENIS REKENING / *Account Type*: GIRO / *Checking Account* — Tabungan / *Savings* — PINJAMAN / *Loan* — LAINNYA / *Other*..........

KODE BAYAR ....

NO. REKENING / *Account Number*: 128-00-0446417-5

JENIS TRANSAKSI / *Transaction Type*: LOKAL / *Local* — ANTAR CABANG / *Interbranch*

NAMA BANK TERTARIK / *Drawee Bank*	NO. CEK/BG / *Cheque Number*	JUMLAH / *Amount*
JUMLAH / *Total*		2.100.000,-

TERBILANG / *In words* .... dua juta seratus ribu rupiah ....

REFERENSI / *Reference* ....

TANDA TANGAN TELLER / *Teller's Signature* — TANDA TANGAN PENYETOR / *Depositor's Signature*

Lembar 2 = untuk Nasabah

FOTO COPY " BERNA JAYA "
MELAYANI: LAMINATING, PENJILIDAN DAN ALAT & TULIS
MASJID AL BAIDHO KUMAI HILIR
(0532) 6102041, 081349502137

18-10-06

Tuan / Toko: Kumai

NOTA NO

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
1	Jilid Peng 2B	2250	39.000

LUNAS

Jumlah Rp. 39.000

Tanda Terima — Hormat kami,

PetraDIOZ

P. Bun, 18/10/06

Tuan ....

Toko ....

Jl. Pakumegara No. 24 Pangkalan Bun - Kalimantan Tengah

Sales, Upgrade, Service, Rental, Install Programs & Games, Setting System, Design Grafis, Video Editing, LAN, Game Zone, Back Up, Scan, Print, Photo Copy

NOTA

UNIT	KETERANGAN	SATUAN	JUMLAH
3 H	Scan		15000
2 Lb	print		5000

Total Rp. 20.000

Tanda terima, — *Terima kasih.*

Tanggal 14/10. 20 06.

UD. "LOGOS"
JUAL ALAT TULIS KANTOR
JL. SUTAN SYAHRIR NO. 75
TELPON (0532) 23207
PANGKALAN BUN

No. ____

NAMA BARANG	Harga	Jumlah
Bk. Polio visio 100		7500
Bk. kas Polio		10.000
label harga		2.000
Plastik obat		2.500

Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan.

Jumlah Rp. 22.000

P. Bun, 9/10/06

Tuan .....
Toko .....

PetraDIOZ
Jl. Pakunegara No. 24 Pangkalan Bun - Kalimantan Tengah
Sales, Upgrade, Service, Rental, Install Programs & Games, Setting System, Design Grafic, Video Editting, LAN, Game Zone, Back Up, Scan, Print, Photo Copy

NOTA

UNIT	KETERANGAN	SATUAN	JUMLAH
140 Lb	(Foto Copy)		33.000

Total Rp. 33000

Terima kasih

..... 20 .....

Tuan .....
Toko 19/10/06

NOTA NO. ____

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
40	Poipen		17.000
4	Buku Gosok		30.000
14	Photo Copy		12.000
10	Photo Copy		9.000

TERIMA PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan.

Jumlah Rp. 68.000

Hormat kami,

23

..... 20 .....

Tuan .....
Toko 19/10/06

NOTA NO. ____

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
1 pak	Kertas plastik obat.		2500

TANDA TERIMA PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan.

Jumlah Rp. 2500

Hormat kami,

No.
Telah terima dari FNPF
Uang sejumlah seratus dua puluh lima ribu rupiah
Untuk pembayaran charter speed boat ke Tanjung Harapan

Kumai 19-Okt-06

Rp. 125.000,-

No.
Telah terima dari FNPF
Uang sejumlah Dua ratus dua puluh lima ribu rupiah
Untuk pembayaran charter mobil ke Dinas Pendidikan dan Pengajaran

Kumai 20-Okt-06

Rp. 225.000,-

20-Okt-06

Tuan
Toko

OTA NO.

ANYAKNYA	NAMA BARANG	HARGA	JUMLAH
2 org	makan di rasau		35.000,-
		Jumlah Rp.	35.000,-

Tanda Terima

Hormat kami,

No.
Telah terima dari FNPF
Uang sejumlah
Untuk pembayaran Charter speed ke Rasau

20-10-2006

Rp. 400.000,-

Mustafa

No.
Telah terima dari FNPF
Uang sejumlah dua ratus dua puluh lima ribu rupiah
Untuk pembayaran charter mobil ke pangkalan Bun
Kumai 29 Okt 06
Rp. 225.000,-

No.
Telah terima dari FNPF (Kay - Kasri)
Uang sejumlah
Untuk pembayaran Charter speed Kumai - Pasair
30 - 10 - 06
Rp. 400.000,-
MASRANI

Tuan
Toko 30/10

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
Pa	Depom		20.000
sup	Pipa Besi		55.000
	Sok + Klem		30.000

Jumlah Rp. 105.000

Tanda Terima

Hormat kami,

30-10 20 06
Tuan
Toko

NOTA NO.

BANYAK NYA	NAMA BARANG		
1	Mangkok Stainless Steel		35.000,-
1	wajan		35.000,-
1	Mangkok Bening		15.000,-

TANDA TERIMA PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan.

Jumlah Rp. 85.000

Hormat kami,

Tuan
Toko

OTA NO. .....

ANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	makan siang		-
	di rasau		38-000,-

Jumlah Rp. 38-000,-

Tanda Terima

Hormat kami,

Tuan
Toko 31 - 10 - 2006

NOTA NO. (3)

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
-			
2	BTL. Aqua besar	4.000	8.000
2	BTL. coca cola	5.500	11.000

Jumlah Rp. 19-000

Tanda Terima

Hormat kami,

Kay Howe Icasri

Ds Ranau

Tuan
Toko 31 - 10 - 2006
Rasau

NOTA NO. (1)

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	Makan 2 org		
	Icasri / Kay Howe		40.000

Jumlah Rp. 40.000

Tanda Terima

Kay Howe Ics

Hormat kami,

No.
Telah terima dari Yenny F - FNPF
Uang sejumlah
Untuk pembayaran Charter speed boat Aspai

1 November 2006

Rp. 400.000,-

MASRANI

Warung Aspai 1/11 2006
Tuan
Toko

A NO.

NAMA BARANG	HARGA	JUMLAH
Aqua Botol Besar		16.000,-
Kopi		9.000,-
Hemaviton drink		10.000,-
Tango		5.000,-
Wade goreng		10.000,-
		50.000,-

...t kami,

...unir

SPBU 64 - 0404 TELP. (0532) 31582
KUMAI

BON KONTAN

21 LTR PREMIUM Rp. 10.000,-
LTR CAMPURAN
LTR SOLAR
LTR ...
AGUA/2000 ...

KUMAI. 3 Nov 06

TERIMA KASIH ATAS KUNJUNGAN ANDA

BU 64 - 0404 TELP. (0532) 31582
KUMAI

BON KONTAN

LTR PREMIUM Rp. 10.000
LTR CAMPURAN Rp.
LTR SOLAR Rp.
LTR ... SAE Rp.
A/2000 ... Rp.

...AI 3-11 19.06

TERIMA KASIH ATAS KUNJUNGAN ANDA

3/11 20
Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	Rental motor		Rp. 40.000,-

TANDA TERIMA PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan.

Jumlah Rp. 40.000,-

Hormat kami,

.... 20 06

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	Pukis		Rp 20.000,-

TANDA TERIMA PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan. Jumlah Rp. 20.000,-

Hormat kami,

.... 20 ......

Tuan 03/11-06
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
10 pk	Gogo	2.000	20.000

SWALAYAN Borneo Khatulistiwa JL. PASANAH 2 ... (0532) 24521-23810 PANGKALAN BUN (KAL-TENG)

TANDA TERIMA PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan. Jumlah Rp. 20.000

Hormat kami,

No. ____________

Telah terima dari EMPF

Uang sejumlah Seratus Ribu rupiah

Untuk pembayaran charter klotok Kumai - Tanjung

Tanjung 3 Nop 06

KARDI

Rp. 100.000,

No. ____________

Telah terima dari EMPF

Uang sejumlah Empat puluh ribu rupiah

Untuk pembayaran sewa sepeda motor ke P. Bun

Kumai 4 Nop 06

Rp. 40.000,

SWALAYAN
Borneo
Khatulistiwa

JL. PASANAH NO. 2 TELP. (0532) 24521
PANGKALAN BUN (KAL - TENG)

4 - 11 2006

Tuan
Toko

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
10	Gogo drink		20.000,-
10	Roti coklat		30.000,-

TANDA TERIMA PERHATIAN: Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan
Jumlah Rp. 50.000,-

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	makan untuk anak sekolah (drama)		60.000

CATERING & SNACK
11
TANJUNG HARAPAN - KUMAI

Jumlah Rp. 60.000,-

Tanda Terima

Hormat kami,

No.
Telah terima dari: FNPF
Uang sejumlah: Seratus ribu rupiah
Untuk pembayaran: charter Speed Boat ke tanjung harapan

Kumai 6-Nop-06

Rp. 100.000,-

MASRANI

Tuan FMPF
Toko

TA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
5	Bambu	10000	150.000,-
	Kajang/Atap Daun		15.000,-
	Kayu 1½ x		10 000,-
2	Kayu 5X10	15 000	30 000,-
2	Ongkos Tukang	50 000,-	100.000,-
	Ongkos Kotok		80000,-

Jumlah Rp. 385-000,-

Tanda Terima

Hormat kami,

7-MOP-06.

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
4 bh	Nasi Campur +		
5 gelas	Fs teh		35.000,-

Jumlah Rp. 35.000,-

Tanda Terima

Hormat kami,

No. ....

Sudah diterima dari : FMPF

Uang Sebanyak : ~~SERATUS LIMA PULUH RIBU RUPIAH~~

Untuk membayar : PENYIARAN TALK SHOW SABTU, 11 NOVEMBER 2006

P.BUN, 11 - 11 2006

Terbilang Rp. ~~150.000,-~~

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11 - NOP - 06 -

Tuan
Toko

TA NO. ....

IYAKNYA	NAMA BARANG	HARGA	JUMLAH
	Radio Quiz prize		80.000,-
	(Kaos / T-shirt)		
		Jumlah Rp.	80.000,-

Tanda Terima

Hormat kami,

11 - 11 - 06

Tuan Yenny

Toko

TA NO.

ANYAK NYA	NAMA BARANG	HARGA	JUMLAH
5	Karton	2000	10.000
1	Buku gambar	2000	2000
2	Kuas Kecil	750	1.500
2	Kuas Besar	3.000	6.000
1	spidol perak	12.000	12.000

NDA TERIMA

PERHATIAN :
Barang-barang yang sudah dibeli
tidak dapat ditukar atau dikembalikan

Jumlah Rp. 31.500

Hormat kami,

No.

Telah terima dari ENPF

Uang sejumlah Dua ratus dua puluh lima ribu rupiah

Untuk pembayaran charter mobil ke P. Bun

Kumai 21 Nop 06

Rp. 225.000,-

Dahlan

20
Tuan Yenny
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	Voucher Simpati		98.000,-

TANDA TERIMA
PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan.

Jumlah Rp. 98.000,-

Hormat kami,

21-NOP-06

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	Buku Gambar		10.000,-

Jumlah Rp. 10.000,-

Tanda Terima

Hormat kami,

---

fenny

22/11-06 20

TOKO RIOU JUNIOR
SEDIA : ALAT - ALAT TULIS, PHOTO COPY, PERCETAKAN
JLN. BENDAHARA No. 26 KUMAI HILIR
KUMAI - KOTA WARINGIN BARAT HP. 081 349499996

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	pulpen standar		17.000
	Buku tulis		9.500

TANDA TERIMA
PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan.

Jumlah Rp. 26.500

Hormat kami,

TOKO RIOU JUNIOR
SEDIA : ALAT - ALAT TULIS, PHOTO COPY, PERCETAKAN
JLN. BENDAHARA No. 26 KUMAI HILIR
KUMAI - KOTA WARINGIN BARAT HP. 081 349499996

---

(3)

Tuan 22/11 06
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
3	Kertas		3.000
1	Plastik 1/4		2.000
1	Plastik 1/2 kg		3.500

Jumlah Rp. 8.500,-

Tanda Terima

Hormat kami,

BENGKEL LAS, BUBUT, SLYP & CORTER
ALAT PERKAPALAN, PABRIK & PERKEBUNAN SAWIT
"SUMBER BARU"
Jl. Bendahara No. 35 Telp. (0532) 61542/61967 Fax (0532) 61542/61967
KUMAI, KALIMANTAN TENGAH

Kumai, 22 NOV 20 06

FNPF

NOTA NO. 001249

nyaknya	Nama Barang / Dikerjakan	Harga Satuan	Jumlah
unit	Metode Pethode Mercury + Blower		1.400.000,-

LUNAS
28 Nov 2006

Penerima	*Perhatian : Barang² yang dalam tempo 2 bulan sesudah tanggal selesainya belum diambil, bukan menjadi tanggung jawab kami*	Hormat kami,	Jumlah Rp.	1.400.000,-
			Telah dibayar	500.000,-
			Sisa	900.000,-

No. _____
Telah terima dari Yenny
Uang sejumlah [illegible]
Untuk pembayaran Charter speed boat ke Sekonyer

23 - 11 - 2006

Rp. 100.000,-

Amat

CATERING & SNACK
" 1 1 "
TANJUNG HARAPAN – KUMAI

Tuan / Toko 23 - NOV - 2006

NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
Bh	Nasi campur	10.000	400.000,-

Jumlah Rp. 400.000

Tanda Terima

Hormat kami,

Ayat

Tuan / Toko 23 - NOV - 06

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
50 Bh	kue Bonat taqua gede	1.500	75.000,-

CATERING & SNACK
" 1 1 "
TANJUNG HARAPAN – KUMAI

Jumlah Rp. 75.000,-

Tanda Terima

Hormat kami,

Ayat

No.

Telah terima dari ENDE

Uang sejumlah Seratus ribu rupiah

Untuk pembayaran charter speed boat kpj ke Tanjung Harapan

Kumai 23 - NOP - 06

Rp. 100.000

MASRANI

No.

Telah terima dari Yenny

Uang sejumlah Empat ratus ribu rp

Untuk pembayaran Charter speed boat Kumai - Aspai

24 - 11 - 06

Rp. 400.000,-

MASRANI

24 - 11 2006

Tuan / Toko Yenny

TA NO.

BANYAK	NAMA BARANG	HARGA	JUMLAH
	Udang		15.000,-
	Baung		15.000,-
	Cumi 2		10.000,-
	Kepiting		15.000,-
	Bawal putih		15.000,-
	Gabus		15.000,-

TANDA TERIMA PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan. Jumlah Rp. 85.000,

Hormat kami,

KEMBAR JAYA
PHOTO COPY / LAMINATING
JL. GERILYA No. 339 TELP. 0532-81810
KUMAI HULU - KALTENG

24 - 11 2006

Tuan / Toko

4

NOTA NO.

BANYAK	NAMA BARANG	HARGA	JUMLAH
1	Box Amplop PAPER LINE		14.000

TANDA TERIMA PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan. Jumlah Rp. 14.000

Hormat kami,

UMOO

Tuan / Toko 25 - NOV - 06.

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
buah	kue donat + aqua gelas	1.500	75.000,-

CATERING & SNACK "11" TANJUNG HARAPAN - KUMAI

Jumlah Rp. 75.000

Tanda Terima

Hormat kami,

25 - 11 2006

Tuan / Toko FNPF

NOTA NO.

BANYAK	NAMA BARANG	HARGA	JUMLAH
½ kg	Bawal Putih		10.000,-
¼ kg	Udang		10.000,-
½	Bawal Hitam		7.000,-

TANDA TERIMA PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan. Jumlah Rp. 27.000,-

Hormat kami,

25-NOV-06.

Tuan/Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
3	Nasi Campur +		
3	Es Teh		25.000,-

Jumlah Rp. 25.000,-

Tanda Terima

Hormat kami,

No. ________

Telah terima dari: ENDE

Uang sejumlah: [illegible]

Untuk pembayaran: charter mobil ke SMA N [illegible]

[illegible], 25 [illegible]

Rp. [illegible]

SPBU 64 - 0404 TELP. (0532) 21582

K U M A I

[illegible] TAN

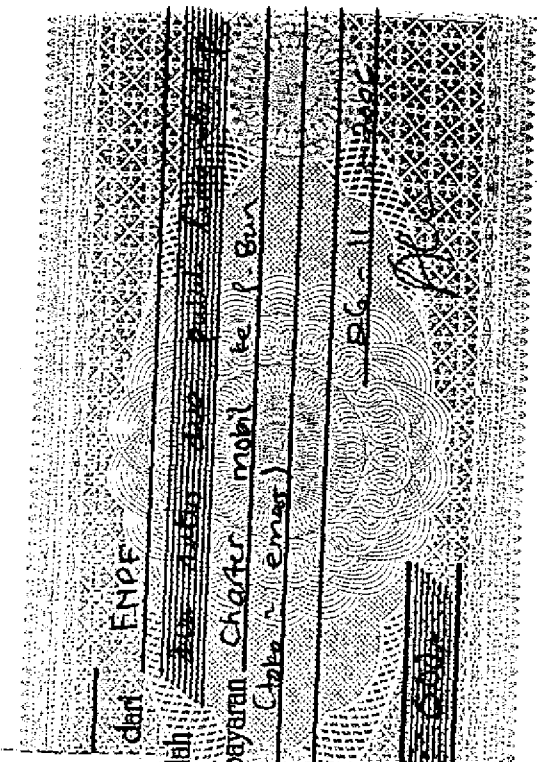
10 lt — Bensin

50.000,-

AQUA [illegible]

KUMAI ... 25 NOV ... 06.

TERIMA [illegible] KUNJUNGAN ANDA



26-NOV-06

Tuan
Toko

OTA NO. .....

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	Nasi Campur		
	Es Teh		35-000,-

Jumlah Rp.

Tanda Terima

Hormat kami,

UM106

Tuan
Toko 27/06.
11

NOTA NO. .....

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
1	Bawal Hitam		15-000.
1	Kafap		12.000

Jumlah Rp. 27.000,-

Tanda Terima

Hormat kami,

Bedauin

Tuan/Toko 27-Nov-2006

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
[illegible] Bh	kue donat tagua gls	1.500	75.000,-

CATERING & SNACK "11" TANJUNG HARAPAN - KUMAI

Jumlah Rp. 75.000

Tanda Terima

Hormat kami

Telah terima dari Yenny
Uang sejumlah seratus lima ribu rp
Untuk pembayaran Ojek 3 motor dan 30 Bedauin ke
Pelabuhan Klotok Kumai Slot
27-11-2006

Rp. 105.000,-

Tuan/Toko 27-11-2006 Yunny

NOTA NO.

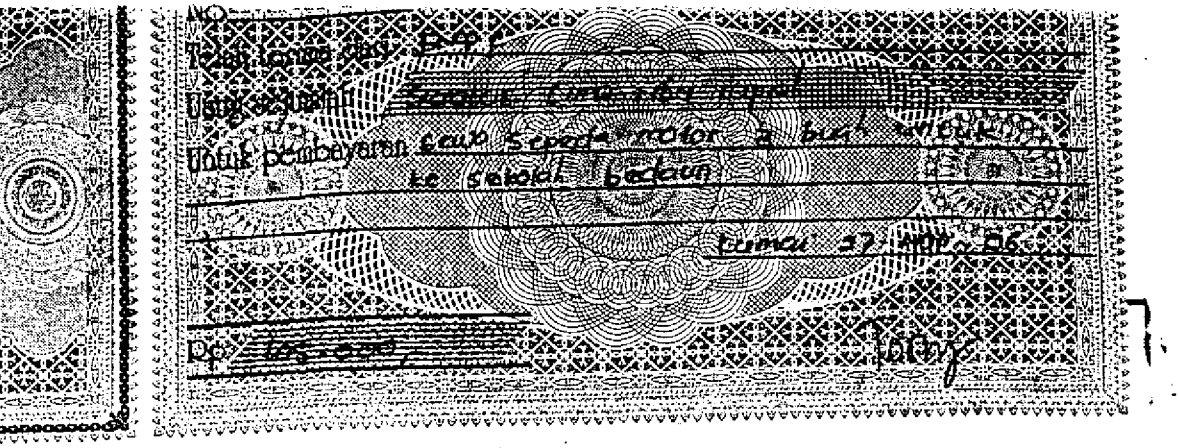
BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
2 bh	Cool Box	17.500,-	Rp. 35.000,-
	Tali tampar		Rp 30.000,-

Jumlah Rp. 65.000,-

Tanda Terima

Hormat kami,

...ah terima dari Yenny
...ng sejumlah [illegible]
...uk pembayaran 1 x PP charter kelotok Kumai [illegible] Bedauin
150.000



27-NOP-06.

Tuan
Toko

TA NO.

YAKNYA	NAMA BARANG	HARGA	JUMLAH
bh	cool Box		14.000,-

Jumlah Rp. 14.000,-

Tanda Terima

Hormat kami,

28 NOV -06

Tuan
Toko FMPF

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
1	Topi Tongui		35.000,-
2	Scarf	7500	15000,-
1	Tas		20.000,-
1/2 15	Sendole plastik		5.000,-

Jumlah Rp. 75 000,-

Tanda Terima

Hormat kami,

28-11-06

Tuan
Toko FMPF

NAMA BARANG	HARGA	JUMLAH
an Kakap		18000,-
ar Tongkol		17000,-
mi - cumi		18.000,-
an Baji Bodeng		10.000,-
an Selar		12000,-
Ikan Bawal		15 000,-
Ikan Putih		6.000,-
Kepiting		20 000,-
Kakap		12.000,-
Ikan Kuran		18.000,-

Jumlah Rp. 130 .000,-

Hormat kami,

Terima

No.

Telah terima dari: EHPF

Uang sejumlah: Dua ratus dua puluh lima ribu

Untuk pembayaran: charter mobil ke SMA [illegible] Pangkalan - Bun

[illegible], 20 Nop 06

Rp. 225.000,-

Tuan 28 - Nov - 06
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
Bh	kue bolu + aqua gls	1.500	75.000,-

Jumlah Rp. 75.000,-

Tanda Terima

Hormat kami,

CATERING & SNACK
"11"
TANJUNG HARAPAN - KUMAI

BON KONTAN

2011	LTR PREMIUM	Rp. 100500,-
	LTR CAMPURAN	Rp
	LTR SOLAR	Rp
	LTR OLIE SAE	Rp
	AQUA/ZUUR/M TEM/GEMUK	Rp

KUMAI 28 - 11 19 06

TERIMA KASIH ATAS KUNJUNGAN ANDA

SPBU 64 - 0404 TELP. (0532) 71582
K U M A I

BON KONTAN

10	LTR PREMIUM	Rp. 45.000,-
	LTR CAMPURAN	Rp
	LTR SOLAR	Rp
	LTR OLIE SAE	Rp
	AQUA/ZUUR/M TEM/GEMUK	Rp

KUMAI 28 - 11 19 06

TERIMA KASIH ATAS KUNJUNGAN ANDA

28 - 11 - 06
Tuan
Toko Kumai

NOTA NO. 5

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
1	Jale lain		8000
1	Bentri		2000

FOTO COPY "ERNA JAYA"
MELAYANI: LAMINATING, ... DAN ALAT ...
JL. MASJID AL BAITHU KUMAI HILIR
TELP. (05..) 71060 HP. 08134...

Jumlah Rp. 10000

Tanda Terima

Hormat kami,

STAR CARGO

BUKTI PENGIRIMAN CARGO UDARA

BPC NO.: 092466 **CU**

Nomor Pelanggan : CASH PKN

Branch Office : O Balikpapan, Jl. Jend. Sudirman No. 80 Telp. 0542 - 736622, 737473, 7315350 Fax. 0542 - 736622 O Samarinda, Jl. Gatot Subroto No. 80 Telp. 0541-742110, 743780 Fax. 0541 - 742110 O Berau, Jl. SA. Maulana No. 17 Telp. 0554 - 21007, 23276 Fax. 0554 - 21007 O Tanjung Selor, Jl. Katamso No. 21 Telp./Fax. 0552 - 22205 O Tarakan, Jl. Jend. Sudirman No. 09 Telp. 0551 - 51578, 25840 Fax. 0551 - 51578 O Pontianak, Jl. Abdurahman Saleh No. 01 Telp. 0561 - 736482, 58394 Fax. 583944 O Ketapang, Jl. R. Suprapto No. 44 B Telp./Fax. 0534 - 35588 O Pangkalan Bun, Jl. Hasanuddin No. 2 Telp./Fax. 0532 - 22824 O Sampit, Hotel Mendian Jl. A. Yani No. 28 Telp./Fax. 0531 - 33300, 33345, 6705188 Fax. 0531 - 33300, 33345 O Banjarmasin, Jl. A. Yani KM 45 No. 27/7 Telp. 0511 - 3253121, 3253122 Fax. 0511 - 3253122 O Surabaya, Jl. A. Yani No. 11 Waru - Sidoarjo Telp. 031 - 8668531, 8554358, 8584185, 8536789, 8557887 Fax. 031 - 854358 O Bandung, Jl. Abdurahman Saleh No. 67 Telp. 022 - 7809778, 6030341 Fax. 022 - 6005567 O Semarang, Jl. Jend. Sudirman No. 219 Telp. 024 - 7604124, 7622227 Fax. 024 - 7604124, 7609812 O Jogyakarta Air Port Adi Sucipto Telp. 0274 - 487854 O Palangkaraya, Airport Cilik Riwut Telp. 081 2515 3315 O Batulicin, Jl. Transmigrasi Telp. 0518 - 7705546 O Bima, Jl. Soekarno Hatta No. 279 Telp./Fax. 0374 - 487854 O Denpasar, Terminal Keberangkatan Domestik Airport Ngurah Rai Telp. 0361 - 762123, 762246, 768259 Fax. 0361 - 768342 O Ende, Jl. A. Yani No. 8 Telp. 0381 - 24573, 24542 Fax. 0381 - 24542 O Jogyakarta, Jl. Solo Km. 8 Telp. 0274 - 484812, 487854 Fax. 0274 - 484812 O Ketapang, Jl. R. Suprapto No. 44 Telp. 0534 - 35588, 35599 Fax. 0534 - 35599 O Kota Baru, Jl. H. Hasan Basri No. 29 A Telp. 0518 - 21639 Fax. 21639 O [illegible], Jl. Soeharto 788 Telp. 0380 - 820999, 821679, 8081617 Fax. 0380 - 821719 O Maumere, Jl. dr. Wahidin No. 7 Telp. 0382 - 23678, 23876 Fax. 0382 - 21601 O Nunukan, Jl. TRI No. 120 Telp. 0556 - 23013 Fax. 24624 O Palangkaraya, Jl. Ahmad Yani 51 Telp. 0536 - 3222536 Fax. 0536 - 3222780 O Pontianak, Jl. Abdurahman Saleh No. 01 Telp. 0561 - 736482, 583944 Fax. 583944 O Sangata, Jl. Yos Sudarso [illegible] No. 130 Teluk Lingga Sangata Kutai Timur Telp. 0549 - 23617 Fax. 0549 - 23817 O Waingapu, Jl. R. Suprapto No. 43 Telp. 0387 - 62752, 61325 Fax. 0387 - 61325

PENGIRIM	Kode Asal	PENERIMA	Kode Tujuan
YENI P.BUN	PKN	LISA P.RAYA	PKY

Koli	Berat	Keterangan Barang
1	5	PAKET

Instruksi Pengiriman

Cara Pembayaran	Biaya Pengiriman	
[✓] Tunai	Tarif	5.000
[ ] Kredit	Jumlah	25.000
[ ] Tagih Tujuan	Surcharge	
[ ] F.O.C	Adm.	22.500
[ ]	TOTAL	27.500

Tanda Tangan Petugas	Tanda Tangan Pengirim	Tanda Tangan Penerima
BIV	Pengirim setuju dengan syarat pengiriman dibalik lembar ini	
Tanggal : 28-11-06 Jam 09[30] WIB	Tanggal : Jam	Tanggal : Jam

Asli : Pengirim Biru : Manifest Merah : LHPC Hijau : Bukti Tanda Terima Kuning : Penerima

---

DEPOT ES TELER AYU — M'SBAR — TELP. ______ — KELURAHAN BARU

28 - 11 - 06

Tuan
Toko ....

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	Nasi Putih	2000	6.000,-
	Mie Goreng		12.000,-
1	Udang Mst Kecap		10.000,-
1	Nasi Goreng Ist		12.000,-
1	Es Teh		1.000,-
2	Es Juice		10.000,-
2	Es Teler		5.000,-

Jumlah Rp. 56.000,-

Tanda Terima Hormat kami,

No. ______

Telah terima dari ENDP

Uang sejumlah [illegible]

Untuk pembayaran Charter mobil ke [illegible]

29-11-2006

Rp. [illegible]

29/11

Tuan 29. Nov. 06.
Toko

unido

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
0 ktk	Nasi +aqua	15.000,-	450.000,-

Jumlah Rp. 450.000,-

Tanda Terima

Hormat Kami,

CATERING & SNACK "11" TANJUNG HARAPAN - KUMAI

Feri

Tuan 29 - 11 - 06
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
2 ktks	Roti Nanas		10000
2 ktks	Roti [illegible]		6000
			16000

Jumlah Rp.

Tanda Terima

Hormat kami,

TOKO RIOU JUNIOR
SEDIA : ALAT - ALAT TULIS, PHOTO COPY, PERCETAKAN
JLN. BENDAHARA No. 28 KUMAI HILIR
KOTA WARINGIN BARAT HP. 081 349499996

29/11-06 20

NAMA BARANG	HARGA	JUMLAH
map plastik Tali	42.000	84.000
pulpen standar	17.000	34.000
Block Note	30.000	60.000

Jumlah Rp. 178.000

TANDA TERIMA

PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan

Hormat kami,
TOKO RIOU JUNIOR

SPBU 64 - 0404 TELP. (0532) 31582
KUMAI

BON KONTAN

10 Lt ... Bensin 30000,-

AQUA/ ...

KUMAI 29 - Nov 19 06

TERIMA KASIH ATAS KUNJUNGAN ANDA

KUMAI

BON KONTAN

10 Ltr ... Rp. 50-000,-

AQUA/ 2000/... /GEMUK Rp. ......

KUMAI 29 - November 06 19...

TERIMA KASIH ATAS KUNJUNGAN ANDA

CELL COM
JL.PAKUNEGARA
PANGKALAN BUN
27027

Tanggal : 30-11-2006
Kepada Yth. : Cash

FAKTUR PENJUALAN

No. : 2540

Mekanik : Darma

No.	Nama Barang	Jumlah	Harga Satuan (Rp)	Potongan (Rp)	Sub Total (Rp)
1	refill rainbow hp hitam	1.00	35,000.00	0.00	35,000.00
2	refill rainbow hp warna	1.00	35,000.00	0.00	35,000.00

Total Penjualan	70,000.00
Jasa	0.00
Potongan Tunai	0.00
PPN	0.00
Total Pembayaran	70,000.00

Catatan :

Barang yang sudah dibeli tidak dapat dikembalikan/ditukar kecuali ada perjanjian. Pembayaran dengan Giro/Cek baru dianggap lunas apabila sudah dicairkan.

Penerima	Pengirim	Hormat kami
(...........)	(...........)	(CELL COM Jl. Pakunegara ... 081250797 ...)

Tuan
Toko

1/12/06

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
1 Kg	Arie		75000
1 Kg	gelas		17000
YEMI			

Jumlah Rp. 9200

Toko "NUSANTARA"
JUAL ALAT BANGUNAN & LISTRIK
JL. BAHARI RT. 08
KUMAI

Tanda Terima

Hormat kami,

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
1	Pel tangkai besi		35000

Jumlah Rp. 35.000

Tanda Terima

Hormat kami,

UNIDO 5-12-2006

BALI INDAH
DIGITAL PHOTO STUDIO
JL. PANGERAN ANTASARI NO. 1
TELP. (0532) 25983
PANGKALAN BUN.

Tuan
Toko

Cash

NOTA NO.

YAKNYA	NAMA BARANG	HARGA	JUMLAH
pc	Baftai Duracell		20000
	9 Volt.		
	YEMI		

Jumlah Rp. 20.000

RHATIAN
ang-barang yang sudah dibeli
apat dikembalikan/ditukar.

a Terima

Hormat kami,

CELL COM
JL.PAKUNEGARA
PANGKALAN BUN
27027

Tanggal : 05-12-2006
Kepada Yth. : Cash

lantr

FAKTUR PENJUALAN

No. : 2665

Mekanik : Atika

No.	Nama Barang	Jumlah	Harga Satuan (Rp)	Potongan (Rp)	Sub Total (Rp)
1	cd blank gtpro	10.00	2,500.00	0.00	25,000.00

Total Penjualan	25,000.00
Jasa	0.00
Potongan Tunai	0.00
PPN	0.00
Total Pembayaran	25,000.00

Catatan :

Barang yang sudah dibeli tidak dapat dikembalikan/ditukar kecuali ada perjanjian. Pembayaran dengan Giro/Cek baru dianggap lunas apabila sudah dicairkan.

Penerima	Pengirim	Hormat Kami,
(.....)	(.....)	(.....)

CELL COM

Tuan .....
Toko .....

A NO. .....

KNYA	NAMA BARANG	HARGA	JUMLAH
g	Telur Ayam Kampung		70000
kg	Gula		115000,-

Jumlah Rp. 190.000,

Tanda Terima

Hormat kami,

Toko *Fanny*

Jl. Bendahara No. 29
Telp. 0532 – 61029 Kumai

Sedia : Alat Tulis, Kosmetik, Obat²-an, Sembako dll.

Kumai, 7-12 200

Tuan .....
Toko .....

Banyaknya	NAMA BARANG	Harga	Jumlah
20 kg	Gula pasir		Rp. 82.000,-
1 DOS	Susu Carnation		Rp. 215.000,-

TANDA TERIMA

Jumlah Rp. 347.000,-

Barang2 yang sudah dibeli tidak bisa ditukar atau

Hormat Kami,

No.
Telah terima dari: FNPF
Uang sejumlah: Tiga puluh tiga ribu rupiah
Untuk pembayaran: Charter kelotok ke Pangkalan Bun (Dept Kesehatan)

07-12-06

Rp. 33.000,-

Tony

P. Bun, 11-12-06

Tuan/Toko: FNPF

TA NO.

YAKNYA	NAMA BARANG	HARGA	JUMLAH
psg	Sarung tangan karet		20.000,-
		Jumlah Rp.	20.000,-

Tanda Terima

Hormat kami,

Dani

ul lab unido

Kwitansi No.
Sudah terima dari : Drh Yeni Fikdayani
Banyaknya uang : *Tiga juta Rupiah*
Untuk Pembayaran Testosterone ELISA 96 wells Quality 1

Garut, 15 Desember 2006

Drh Netty Maria

YAYASAN

Terbilang Rp. #3.000.000#

FROM : FAX NO. : Feb. 12 2007 11:32PM P1

Tuan Toko Yenny

NOTA NO. .....

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
2	Bh Retort	300.000	600.000
	Ongkos kirim		15.000

PERHATIAN
Barang-barang yang sudah dibeli tidak dapat dikembalikan/ditukar.

Jumlah Rp. 615.000

No. .....
Telah terima dari .....
Uang sejumlah .....
Untuk pembayaran Charge mobil
Rp. .....

No. 000046
Telah terima dari
Uang sejumlah
Untuk pembayaran Tiket P.Sin - Semarang - P.Sin
a/n YENI ZULDAYANI
P.Sin, 18 - 12 - 2006
Rp. 1.262.000

TIKET PENUMPANG Non Ekonomi

BUS PATAS PO. Nusantara

Nº 0177221

NAMA :

ALAMAT:

ASAL :

TUJUAN : YOGYA

NO.KURSI : 27

NO. BUS :

• TANGGAL : 20-12-06

• HARI :

• WAKTU BERANGKAT :

• WAKTU KUMPUL :

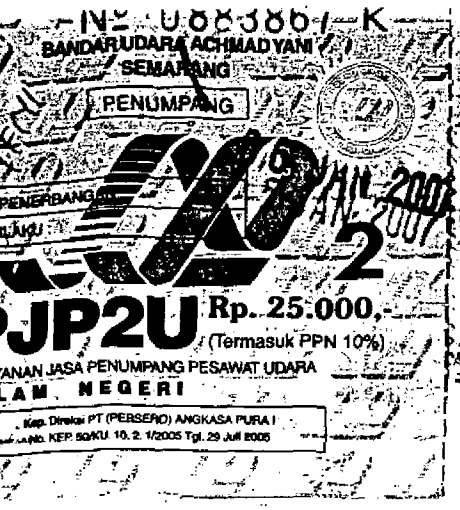
• TEMPAT KUMPUL :

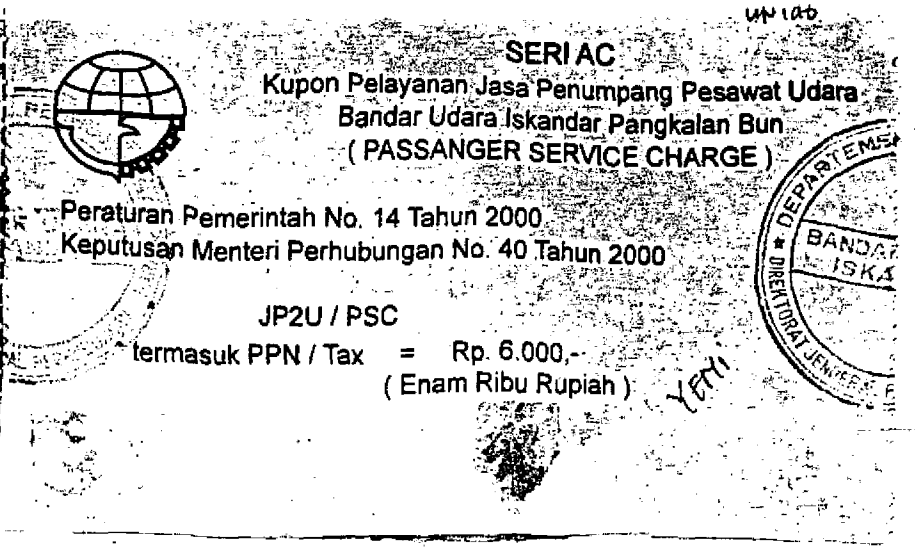
TARIF TERMASUK IURAN WAJIB JASA RAHARJA

Rp. 30000

COMMITMENT TO EXCELLENCE

CAP & TTD





ASIA LAB

Jl. Agro, Karangasem CT III No. 44A
Kocoran Yogyakarta
(Depan Fakultas Kehutanan UGM)
Telp. (0274) 558152, 520576
Fax. (0274) 555945

20 Des 06

TUAN .....
TOKO .....
.....

NOTA NO 15

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
200 pcs	Yellowhps	200	40.000
180x	Glovs		28.006

JUMLAH Rp. 68.000

PERHATIAN :
Barang yang sudah dibeli
tidak dapat ditukar/dikembalikan

YENI

Tanda Terima

Hormat Kami

TAXI SERVICE
AHMAD YANI AIRPORT
SEMARANG

A№ 0028468

UNTUK PENUMPANG : 169

Nomor: X W IRU

Jurusan

Beaya perjalanan Rp. 40000

Semarang :

PETUGAS

Untuk
1 (satu) tempat
Telp. (024) 7611177

Tuan
Toko

TA NO.

YAKNYA	NAMA BARANG	HARGA	JUMLAH
	makan + minum		
	untuk ke sekolah		80.000,-

CATERING & SNACK "1 1" TANJUNG HARAPAN – KUMAI

Jumlah Rp. 80.000,-

Tanda Terima

Hormat kami,

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	nasi campur		49.000,-

CATERING & SNACK "1 1" TANJUNG HARAPAN – KUMAI

Jumlah Rp. 49.000,-

Tanda Terima

Hormat kami,

Yupit

No.

Telah terima dari PMPF

Uang sejumlah Dua ratus dua puluh lima ribu rp

Untuk pembayaran Charter mobil ke Pang Bun SMAN 3

21-11-06

Rp. 225.000,-

UNIDO

YENI

No.

Telah terima dari Drh. Yeni Fildayani

Uang sejumlah Tiga ratus ribu rupiah

Untuk pembayaran Fee Laboratorium dan perlengkapan analisis hormon Testosteron menggunakan ELISA di Labor Fisiologi dan Laboratorium Patologi Klinik, Fak Ked. Hewan UGM.

Yogyakarta 21.12.06

Penerima

Rp. 300.000

Tuan FMPF
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
65	Donat coklat		Rp. 65.000,-
1 dos	Minuman mineral		Rp. 15.000,-

CATERING & SNACK
TANJUNG HARAPAN – KUMAI

Jumlah Rp. 80.000,-

Tanda Terima

Hormat kami,

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
4	makanan Campur + Es Jeruk		45.000,-

Jumlah Rp. 45.000,-

Tanda Terima

Hormat kami,

No.
Telah terima dari FMPF
Uang sejumlah dua puluh lima juta rupiah
Untuk pembayaran charter mobil ke SMAN 3 P Bun

Kumai 30-Okt-06

Rp. 25.000.000

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
65	Donat coklat		Rp. 65.000,-
2 dos	minuman Mineral		Rp. 15.000,-

CATERING & SNACK
TANJUNG HARAPAN – KUPANG

Jumlah Rp. 80.000,-

Tanda Terima

Hormat kami,

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
4	Nasi Campur		45.000,
	Es Teh		

Jumlah Rp. 45.000,-

Tanda Terima

Hormat kami,

No. (2) unido

Telah terima dari: FNPF

Uang sejumlah: Dua ratus ribu rupiah

Untuk pembayaran: Honor kegiatan mercury, uks & posyandu.

Kumai 4-1-07

Rp. 200.000,-

(RCS Kualafari)

Kumai 10-01-07

Ponsel "ABIMAYU"
Jl. Bendahara No. 246 Telp. [illegible] KUMAI
Melayani: [illegible] voucher, Aksesoris, [illegible]

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
1	Voucher ekktrik	97.000	97.000.

Jumlah Rp. 97.000.

Tanda Terima   Hormat kami,

No.

Telah terima dari: Yeny

Uang sejumlah: Dua ratus [illegible]

Untuk pembayaran: Rental mobil

Kumai 11-Januari-07

Rp. [illegible]

[illegible]
Jl. Pangeran Diponegoro RT 01 Telp. [illegible]
Kel. Madurejo PANGKALAN BUN

JENIS BBM	KETERANGAN Liter	Harga / Ltr	JUMLAH
PREMIUM	10		45.000,-
SOLAR			
		TOTAL	

Pangkalan Bun 12 Jan 2007

Ttd

(.............................)

PT **Kerta Gaya Pusaka**

VII 27.50 PANGKALAN BUN

SIPJT NO. 002/SIPJT/DIRJEN/96 TGL. 15 JULI 1996
SIUPJT No. 13.248/AL.003/KW.IX/93 TGL 15 JUNI 1993

JUMLAH KIRIMAN	NO URUT SP	NO URUT SPK	NO URUT BTK 30	JENIS TITIPAN
1	1			☐ BARANG CETAKAN ☐ BUNGKUSAN KECIL ☐ PAKET ☐ KARGO

KONOSEMEN 37 - 8 No. 301111 -

PENGIRIM: YENNY FILDAYANI
Jl. Pelita 51 Kumai
P. Bun
TELP

PENERIMA: IBU BUDI SUSILORINI UNIDO
Menara Thamrin Thamrin Lt.10
Jl. Mh. Thamrin Kav.3 JAKARTA
TELP.

JUMLAH SATUAN	JUMLAH BERAT
1	400.Gr

PORTO	Rp. 20.000,-
PPN	Rp. 200,-
PREMI ASURANSI	Rp.
PACKING	Rp. 20.200,-
JUMLAH	Rp.

ISI MENURUT PENGAKUAN: ☐ DIPERIKSA ☐ TAK DIPERIKSA

Document

DITERIMA TGL
CAP

PENGIRIM MENYATAKAN SETUJU DENGAN ISIAN DAN SYARAT-SYARAT PENGIRIMAN YANG TERTERA PADA HALAMAN SEBALIKNYA

17-01-07

N. Efendi

TANDA TANGAN & NAMA JELAS — TANDA TANGAN & NAMA JELAS — BAGIAN PENGIRIMAN

No

Telah terima dari: [illegible]

Uang sejumlah: seratus enam puluh ribu rupiah

Untuk pembayaran: Hadiah quis 1 t-shirt [illegible] for radio quiz (2 pcs)

Kumai 17 Jan 07

Rp 160.000,-

37
15
2

Adult M	Adult F	Immature	Infant/Baby
1	81	37	52
1	10	4.5	6.5

THU, 10-MAY-07 15:38 RODA INTERNET CAFE - BALI 62 361 976582 P.01

Sanur

Account Number | Origin: OPS | Destination: JKT | Air Waybill Number: 1 107008 740002

Customer Reference

Shipper
Company Name: Yayasan Pecinta Taman nasional
Address: Jl. Bisma no. 3 ubud Gianyar
City: Denpasar - bali Postal / Zip Code: 80571
Province / Region:
Country:
Tel. No: (0361) 977978

Receiver
Company Name: (FNPF)
Address: menara Thamrin lt. 10 Jl. MH Thamrin kav. 3
City: jakarta Postal / Zip Code: 10250
Province / Region:
Country:
Attention: Ibu Budi susilorini Tel. No: (021) 3148689

Description of shipments: DOC
Declare Value

Description	Pieces	Weight Kgs	Length	Width	Height	Weight Vol. Kgs
	1	0.1				

Dangerous goods in this shipment? Yes No If yes, please notify our customer service.

Instructions: OBC

Payment Mode: ✓ Cash / Credit / C.O.D

Total

Rp 202.000

Adm.

Rp 202.000

Shipper Signature — Time: 1.00 Date: 18/01/07 Name

JNE Signature — Time: 1.00 Date: 18/01/07 Angela Name

Received by / Receiver — Time: Date: Name

Guarantee Letter for Charge on Delivery (C.O.D)

..., guarantee that the charges of this shipment ... paid by the consignee. If the consignee refuses to ... will accept the charges

Signature

Name

Terms and Conditions of Carriage

I hereby on behalf of myself or anyone else who has an interest in the shipment acknowledge to accept the terms and conditions set out on the reverse side of this air waybill, included but not limited to the liability of maximum US$ 100.00 per air waybill for International shipment or 10 times of shipping fee per air waybill for Indonesia domestic shipment. Shipment with value above US$ 100.00 is recommended to be insured

JNE SERVICES
- Intracity
- Indonesia Domestic
- Diplomat Service
- ✓ Special Express Service
- 'YES' Guarantee Service
- Regular Service
- 'OKE' Cost Saving Service
- International
- Others

Type of Goods
- ✓ Document
- Parcel

Origin: SHIPPER

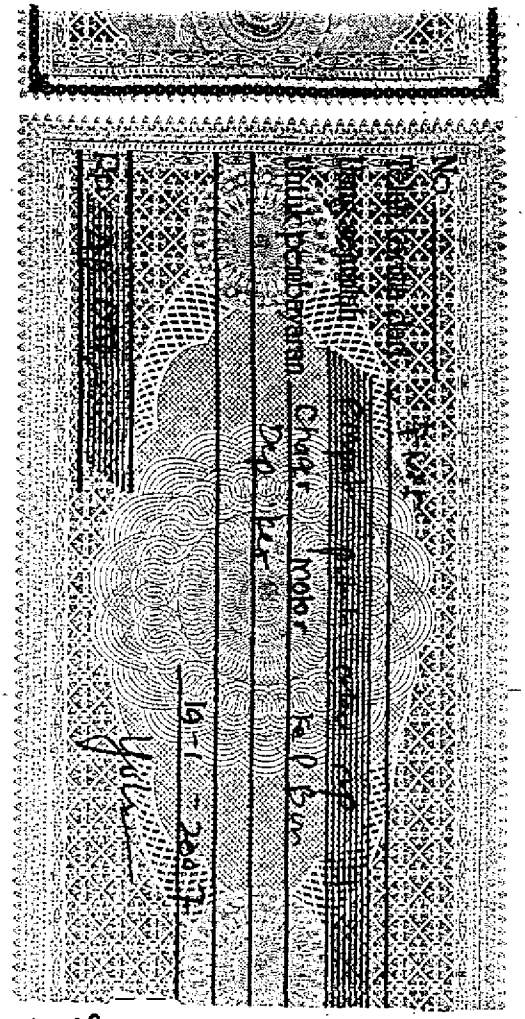
TA NO. .....

YAKNYA	NAMA BARANG	HARGA	JUMLAH
	Biaya kurir		15.000,-
	Ubud - Denpasar		
		Jumlah Rp.	15.000,-

Tanda Terima

Hormat kami,

Komang



UN100

" WISMA RASA " (RM)

Jl. H.M. Rafi'i Pangkalan Bun

No. Meja : 02

AKNYA	NAMA PESANAN	HARGA	JUMLAH
	NASI GORENG	Rp.	
	RAWON	Rp.	
	SOTO	Rp.	
1/	MIE PENTOL	Rp. 6000	12000
	MIE AYAM	Rp.	
	BAKSO	Rp.	
	SODA RIA	Rp.	
	FANTA	Rp.	
	COCA - COLA	Rp.	
	SOSTRO	Rp.	
	TEBS	Rp.	
	SUSU	Rp.	
	JERUK H·1	Rp. 2500	2500
	LIMUS	Rp.	
1	TEH	Rp. 1000	1000
	SELASIH	Rp.	
11	Kerupuk	500	1000
		TOTAL	15.500

Terima Kasih Atas Kepercayaan Anda

Tuan / Toko 19/107

NOTA NO. .....

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
1 Bks	Paku		4.000,-
1 Pcs	graji		22.000,-
1 Pcs	tang		8.000,-
1 Pcs	Palu		17.000,-
1 Pcs	Pahat		8.000,-
3 Pcs	Baut 1/2		15.000
3 m	seng 60 cm		48.000
5 m	kawat		5.000
		Jumlah Rp.	127.000,-

Toko "NUSANTARA"
JUAL ALAT BANGUNAN & LISTRIK
Tanda Terima ARI RT. 03
JL. RUMAH

Hormat kami,

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	Buku gambar +		
	pensil		69.000,-
		Jumlah Rp.	69.000,-

Tanda Terima

Hormat kami,

No.
Telah terima dari
Uang sejumlah
Untuk pembayaran
Rp.

No.

Telah terima dari FNPF

Uang sejumlah dua ratus dua puluh lima ribu rp

Untuk pembayaran Charter mobil ke P. Bun, Kampung Bun toko emas

23 - 1 - 07

Rp. 225.000,-

UNIOC

pt **Kerta Gaya Pusaka**

VII 27.30 PANGKALAN BUN

SIPJT NO. 002/SIPJT/DIRJEN/96 TGL. 15 JUL ...
SIUPJT No. 13.248/AL.003/KW 1x 89 TGL 15 JUN ...

	JUMLAH KIRIMAN	NO URUT SP	SPK	BTK 30	JENIS TITIPAN	
					☐ BARANG CETAKAN	☐ BUNGKUSAN KECIL
	1	1			☐ PAKET	☐ KARGO

KONOSEMEN 37- 8 No. 301320 -

PENGIRIM
Yenny Fildayani
Jl.Pelita 51
Kumai
61212 P.Bun

	Rp.	20.000,-
	Rp.	200,-
	Rp.	
	Rp.	
JUMLAH	Rp.	20.200,-

PENERIMA Unggul SW
UD.Narwasta
Jl.A.Yani 269 B
TELP 031 60324559 Surabaya

JUMLAH SATUAN	BERAT
1	200 gr

ISI MENURUT PENGAKUAN ☐ DIPERIKSA ☐ TAK DIPERIKSA

Doc

DITERIMA TGL

PENGIRIM MENYATAKAN SETUJU DENGAN ISIAN DAN SYARAT-SYARAT PENGIRIMAN YANG TERTERA PADA HALAMAN SEBALIKNYA.

25 Jan 2007

SPBU AF. 64 - 741 .04

Jl. Pangeran Dipcnegoro RT 01 Telp. (0532) 21851
Kel. Madurejo PANGKALAN BUN

JENIS BBM	KETERANGAN		JUMLAH
	Liter	Harga/ Ltr	
PREMIUM			20.000,-
SOLAR			
		TOTAL	20.000,-

Pangkalan Bun 23 - 1 2007

Ttd

(..............................)

Tuan
Toko 28/1-2007

NOTA NO. ....

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	2. gram. X 160000		320000
	Lunas		

Jumlah Rp. 320000

Tanda Terima

Hormat kami,

UNIDC

No.

Telah terima dari FHPF

Uang sejumlah empat ratus ribu rupiah

Untuk pembayaran Charter speed boat Pumai - Rapai

25 January 2006

Rp. 400.000,-

Aseng

unido

Tuan / Toko 25/1 20 07

NOTA No. _____

Banyaknya	NAMA BARANG	HARGA	JUMLAH
1	Air mineral gelas		12.000
	Yemi		

Tanda Terima

PERHATIAN: Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan

Jumlah Rp.

Hormat kami,

25-jan-07

Tuan / Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
60 bh	Donat untuk		
	pelajar program		
	mercy/unido		60.000,-

CATERING & SNACK
"1 1"
TANJUNG HARAPAN - KUMAI

Jumlah Rp. 60.000,-

Tanda Terima

Hormat kami

Kumai, 25-1-07

Tuan / Toko _____

NOTA NO. _____

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
1 bh	Box plastic		20.000,-

Jumlah Rp. 20.000,-

Tanda Terima

Hormat kami,

www.tikijne.co.id

JNE EXPRESS ACROSS NATIONS

Branch / Agent :

Account Number :

Origin : P.BUN.

Air Waybill Number : 1 089975 470000

Customer Reference :

Destination : JAPAN.

JNE SERVICES
- Intracity
- Indonesia Domestic
- Diplomat Service
- Special Express Service
- YES! Guarantee Service
- Regular Service
- OKE Cost Saving Service
- International
- Others

Shipper

Company Name : YENI FILDAYANI, drh.
Address : FKPF.
Jl. pelita 51 kumai
kota waringin barat
kalimantan Tengah.
INDONESIA
Postal / Zip Code :
Province / Region : Country :
Tel. No : 0532-61212

Receiver

Company Name : SHUNICHI HONDA, PHD.
Address : NATINAL INSTITUTE OF MINAMATA DISEASE. Japanese Ministry of Environment
4058-18 Hama, Minamata city
Kumomoto.
City : JAPAN. Postal / Zip Code :
Province / Region : Country :
Attention : Tel. No : 81966633111

Description of shipments : SAMPEL
Declare Value :

Dangerous goods in this shipment ? Yes No If yes, please notify our customer service.

Delivery Instructions :

Payment Mode : X Cash / Credit / C.O.D

Dimensions

Description	Pieces	Weight Kgs	Dimensions Length	Width	Height	Weight Vol. Kgs
	1	0,5				
Total						

Fee : 44.500,-
Insurance :
Insurance Adm. :
Amount :

Shipper signature
Time :
Date : 19 1 07
Name :

JNE Signature
Time : imam
Date : 19 1 07
Name :

Received by / Proof of Delivery
Time :
Date :
Name :

Type of Goods
- Document
- X Parcel

WE CANNOT DELIVER P.O. BOX ADDRESS

Origin : SHIPPER

Guarantee Letter for Charge on Delivery (C.O.D)
I hereby, guarantee that the charges of this shipment will be paid by the consignee. If the consignee refuse to pay, I will accept the charges
Signature :
Name :

Terms and Conditions of Carriage
I hereby on behalf of myself or anyone else who has an interest in the shipment aknowledge to accept the terms and conditions set out on the reverse side of this air waybill, included but not limited to the liability of maximum US$ 100.00 per air waybill for International shipment or 10 times of shipping fee per air waybill for Indonesia domestic shipment. Shipment with value above US$ 100.00 is recommended to be insured

29 jan 07

Tuan / Toko :

NOTA NO. .....

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
10 pack	Crayon	9850	98500,-

Jumlah Rp. 98500,-

Tanda Terima

Hormat kami,

29-1-2

Tuan / Toko :

NOTA NO. .....

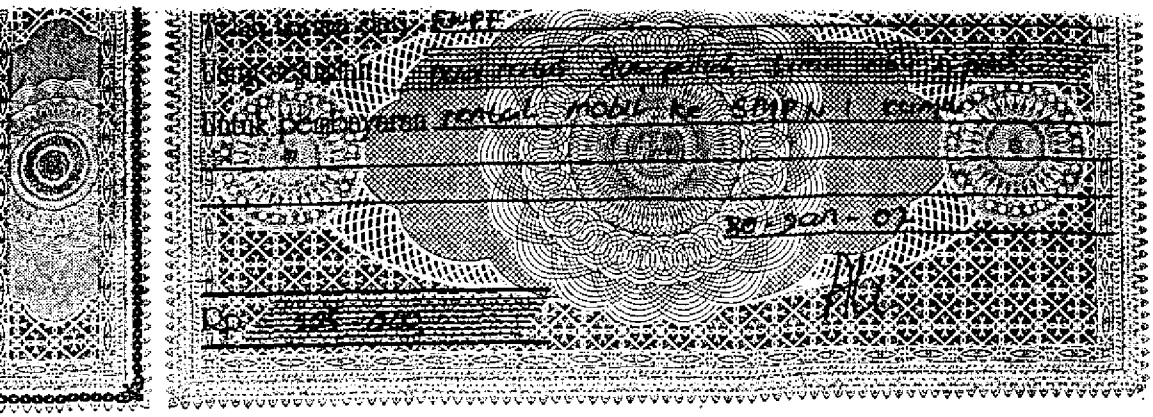
BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
1	Bigi Doraemon.		125000
	Dipa		50.000
			175000

SP CEMPAKA
KIOS: CEMPAKA
SEDIA: BBM/P
JL. BENDAHARA
TELP. (0532)

Jumlah Rp.

Tanda Terima

Hormat kami,



30-Jan-07

Tuan / Toko 30-6-07

NOTA NO. .....

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
1 Doz	Quarter		13.500,-
60	Kue		60.000,-

Jumlah Rp. 73,500

Tanda Terima

Hormat kami,

Tuan / Toko .....

NOTA NO. .....

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
70 Bh	Kue Bonat		70.000,-

CATERING & SNACK
TANJUNG HARAPAN – KUMAI

Jumlah Rp. 70.000,-

Tanda Terima

Hormat kami,

Tanda Terima
JL. PELITA NO.44 Telp = 61320
KUMAI HILIR

30-1-2007

Tuan / Toko W. Kumai Indah

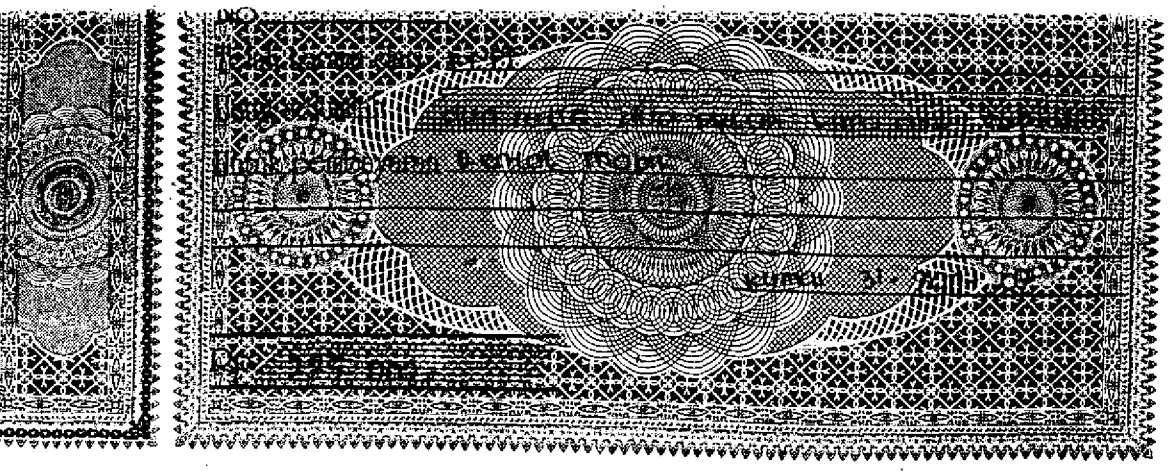
NAMA BARANG	HARGA	JUMLAH
- Simpati Ico		95.000

Jumlah Rp. 95.000

Hormat kami,

PERHATIAN :
Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan.

KUMAI INDAH



UNTUK

No. _____

Telah terima dari Yayasan Pencinta / Penyantun Taman Nasional KOBAR

Uang sejumlah // SATU JUTA DUA PULUH ENAM RIBU RUPIAH ///

Untuk pembayaran Biaya pemeriksaan sample Biota Laut dengan parameter Mercury (Hg)
Sebanyak 19 (Sembilan belas) sample a.rp. 54.000,-

Rp. 1,026.000,-

Pangkalan Bun Raya, 31 Januari 2007

Kasir Penerima,

PEMERINTAH PROPINSI KALIMANTAN TENGAH
BALAI LABORATORIUM KESEHATAN
DINAS KESEHATAN

Ery T.Tuwan,S.IP
NIP.140167353

UD. MARSELLA
Jl. Bendahara No. 37
Phone : 0532 - 61025
Kumai (Kal-Tim)

NYALUR : LPJ, AIR MINERAL, ALAT-ALAT TULIS
LAYANI : FOTO COPY, LAMINATING, DLL

Kepada Yth.
Unido
Kumai

OTA No. : 0000177

ANYAKNYA	NAMA BARANG	HARGA	JUMLAH
1Rm	kertas A4 s 70 sidu		28.000
	YENI		

JUMLAH Rp. 28.000

Hormat kami

YENI

Area

Branch / Agent

UNIDO

www.tikijne.co.id

JNE
EXPRESS ACROSS NATIONS

Account Number | Origin: P. BUN

Air Waybill Number: 1 089971 950001

Customer Reference | Destination: CGK

JNE SERVICES
- Intracity
- Indonesia Domestic
- Diplomat Service
- Special Express Service
- 'YES' Guarantee Service
- X Regular Service
- 'OKE' Cost Saving Service
- International
- Others

Name : PNPF
P. BUN (Kal - Teng).

Postal / Zip Code :
Region : Country :
Tel. No :

Receiver
Company Name : BUDI SUSILORINI. UNIDO.
Address : MENARA THAMRIN Lt. 10
Jl. Mh. Thamrin Kav 3

City : JAKARTA Postal / Zip Code : 10250
Province / Region : Country :
Attention : Tel. No :

of shipments | Declare Value

Dimensions

Description	Pieces	Weight Kgs	Dimensions Length	Width	Height	Weight Vol. Kgs
	1	1				
Total						

rous goods in this shipment ? Yes No If yes, please notify our customer service.

structions | Payment Mode: Cash / Credit / C.O.D

Shipper signature	JNE Signature	Received by / Proof of Delivery
17-000 dm.	Time :	Time :
	Date 02-02-07	Date :
Name Yeni	Name	Name

Type of Goods
X Document
Parcel

WE CANNOT DELIVER T
P.O. BOX ADDRESS

Origin : SHIPPER

ee Letter for Charge on Delivery (C.O.D) — Signature

guarantee that the charges of this shipment aid by the consignee. If the consignee refuse to accept the charges — Name

Terms and Conditions of Carriage
I hereby on behalf of myself or anyone else who has an interest in the shipment aknowledge to accept the terms and conditions set out on the reverse side of this air waybill, included but not limited to the liability of maximum US$ 100.00 per air waybill for International shipment or 10 times of shipping fee per air waybill for Indonesia domestic shipment. Shipment with value above US$ 100.00 is recommended to be insured

TOKO RIOU JUNIOR 03/02-07 20
Tuan UNIDO
SEDIA : ALAT - ALAT TULIS, PHOTO COPY, PERCETAKAN
JLN. BENDAHARA No. 25 KUMAI HILIR
KUMAI - KOTA WARINGIN BARAT HP. 081 349489996

TA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
0	fcopy		40.000

DA TERIMA PERHATIAN: Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan.

Jumlah Rp. 40.000

Hormat kami,

TOKO RIOU JUNIOR
SEDIA : ALAT - ALAT TULIS, PHOTO COPY, PERCETAKAN
JLN. BENDAHARA No. 25 KUMAI HILIR
KUMAI - KOTA WARINGIN BARAT HP. 081 349489996

04-Feb-07

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
30 BKS	nasi campur		300.000,-

CATERING ... TANJUNG HARAPAN - KUMAI

Jumlah Rp.

Tanda Terima

Hormat kami,

DEPOT ES TELER AYU KELURAHAN BARU - MISBAR TELP.

Tgl. 09-Feb-07

Tuan o

Toko

ta No.

Banyaknya	Nama Barang	Harga	Jumlah
	makanan		18.000,-
2	Mie Rebus		
2	Es Juice		

NDATERIMA

Barang² yang sudah dibeli tidak dapat dikembalikan, kecuali ada perjanjian

TOTAL Rp. 18.000,-

9-Feb-2007

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
2 ptg	T-shirts Penyu	80.000	160.000,-

Jumlah Rp. 160.000,-

Tanda Terima

Hormat kami,

No. ______

Telah terima dari: PT. DE

Uang sejumlah: [illegible]

Untuk pembayaran: charter mobil ke P. Bun ... Kindo

Kumai 09 Feb 07

Alw

Rp 225.000,-

Telah terima dari: FNPF

Uang sejumlah: Empat ratus ribu rupiah

Untuk pembayaran: charter Speed Boat Kumai - Rasau

13 February 2007

Yuar

Rp 400.000,-

14-02 20 07

Tuan / Toko ......

NOTA NO. ______

	NAMA BARANG			
1	Voucher Simpati 100			98.000,-

TANDA TERIMA

PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan.

Jumlah Rp. 98.000,-

Hormat kami,

Antariksa Ponsel

— Kumai —

Tuan 15-02-07 UHIDO
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
10	buku gambar		9.000
1	Lem pen Standar		10.000

Jumlah Rp. 19.000

Tanda Terima

Hormat kami,

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
85 bh	kue donat		85.000

CATERING & SNACK
TANJUNG HARAPAN – KUMAI

Jumlah Rp. 85.000,-

Tanda Terima

Hormat kami,

TCA-65 UHIDO Kepada Yth : ARIES
SANTAN KELAPA ASLI 15-02-2007.
a No.

nyak ya	NAMA BARANG	Jumlah
DUS	GRESS	28.000

TOTAL 28.000

COCOK UNTUK SEKALI MASAK

15-Feb-07

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
80 bh	Donat		100.000,-
1	Dos Aqua		

CATERING & SNACK
TANJUNG HARAPAN – KUMAI

Jumlah Rp. 100.000,-

Tanda Terima

Hormat kami,

Mercury

Tuan/Toko 16-02-07

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
50 BH	Kue Babpou dan Asuagene	1.500	

Jumlah Rp. 75.000

Tanda Terima

Hormat kami,

CATERING & SNACK "11" TANJUNG HARAPAN - KUMAI

15 Feb 07

Tuan/Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
4	Nasi campur		58.500
4	Es jeruk		

Jumlah Rp. 58.500

Tanda Terima

Hormat kami,

Tuan/Toko 16/2 07.

NOTA NO. ....

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
5 lbl	Buku gambar	1.500	7.500

Jumlah Rp. 7.500

Tanda Terima

Hormat kami,

---

24 - 02 - 2006

Tuan/Toko ....

NO. ....

	NAMA BARANG	HARGA	JUMLAH
1	Tali rafia		12.000,-

TERIMA

PERHATIAN : Barang-barang yang sudah dibeli tidak dapat ditukar atau dikembalikan.

Jumlah Rp. 12.000,-

Hormat kami,

BUKTI PENGIRIMAN BARANG

0000?98

PO. LOGOS

Alamat Kantor
Pangkalan Bun : Jl. P. Antasari Telp. (0532) 27275 Pangkalan Bun
Sampit : Komplek Terminal Patih Rumbih Telp. (0531) 32931 Sampit
Palangka Raya : Jl. RTA. Milono Km. 1.5 Telp. (0536) 3234729 Palangka Raya

No.	Jenis Barang	Jumlah Koli	Berat Barang	Tarif / KG	Alamat Pengirim	Alamat Penerima
	Tanah + Air	1	7		Yenny P. Bun	Balai Laboratorium Kesehatan Propinsi Kalteng P. Raya
	JUMLAH BIAYA	Rp. 25.000			+ Ongkos Antar Rp. 10.000	

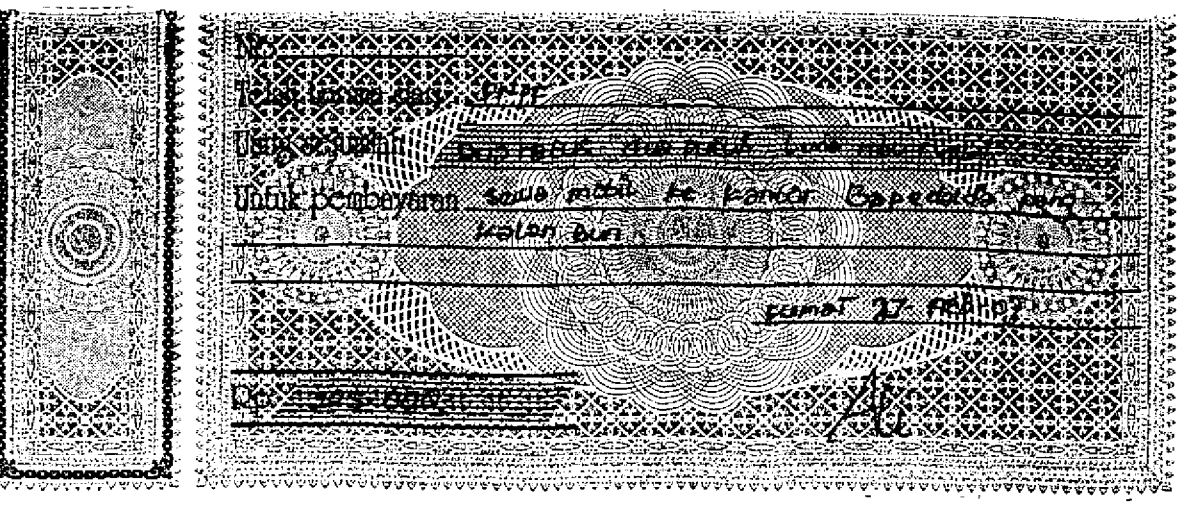
Tanggal 22 2 '07

Tgl. PETUGAS, Yang Mengirim, Yang Menerima,

(Tanda Tangan/Nama Jelas/Cap) (Tanda Tangan/Nama Jelas/Cap) (Tanda Tangan/Nama Jelas/Cap)

Pengirim dan PO. Logos setuju dengan syarat ...

PO LOGOS JL. P. ANTASARI PANGKALAN BUN



27-Feb-07.

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
2	Nasi Campur		22.500,-
2	Es jeruk		

Jumlah Rp. 22.500,-

Tanda Terima

Hormat kami,

28-Feb-07

Tuan
Toko

NOTA NO.

BANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	Radio KPE untuk	-	
	Hadiah kuis Unido		50.000,-

Jumlah Rp. 50.000,-

Tanda Terima

Hormat kami,

Tuan .....
Toko .....

OTA NO. .....

ANYAKNYA	NAMA BARANG	HARGA	JUMLAH
	kaos untuk		
	hadiah kuis unido		160-000,-

Jumlah Rp. 160-000,-

Tanda Terima

Hormat kami,

100

100 FM
Primadona

PT. RADIO MEGAPRIMADONA NADAPERSADA
Jl. Jend. Sudirman 22a, Pangkalan Bun - Kalimantan Tengah
Telp / Fax: 0532 - 21459, Email: primadona100fm@yahoo.com

001 0023

KWITANSI

Sudah terima dari : FNPF.....
Uang sejumlah : SERATUS RIBU RUPIAH.....
.....
Untuk pembayaran : Talk Show Kampanye Program Global Merkuri.....
.....
Nomor order : .....
Catatan : .....
.....

Pangkalan Bun, 03 Maret 2007

Terbilang Rp. 100.000,-

Edmond Lamey

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To: Global Mercury Project (Unido) — No Invoice: 005/09/06
Month: — Month: Sep-06

Date	Service Description	Qty	Amount
30/09/2006	Office Rental & Maintenance		Rp 650.000
30/09/2006	Computer & Printing Facilities		Rp 450.000
30/09/2006	Equipment Maintenance		Rp 150.000

TOTAL AMOUNT	**Rp**	**1.250.000**
DEPOSIT		
TOTAL SHOULD BE PAID	**Rp**	**1.250.000**

Prepared by

Nyoman Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To Global Mercury Project (Unido) — No Invoice **006/09/06**

Month — Month Sep-06

Date	Service Description	Qty	Amount
30/09/2006	Salary drh.Yenny Fildayani		Rp 2.000.000
30/09/2006	Salary Marini Budiarti		Rp 1.500.000
30/09/2006	Salary Kasri		Rp 750.000
30/09/2006	Salary Masnun		Rp 750.000

TOTAL AMOUNT	**Rp 5.000.000**
DEPOSIT	
TOTAL SHOULD BE PAID	**Rp 5.000.000**

Prepared by

[illegible]an Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	**007/09/06**
Month		*Month*	*Sep-06*

Date	Service Description	Qty	Amount
30/09/2006	Telephone/Fax		Rp 300.000
30/09/2006	Internet		Rp 200.000

TOTAL AMOUNT	**Rp**	**500.000**
DEPOSIT		
TOTAL SHOULD BE PAID	**Rp**	**500.000**

YAYASAN PECINTA TAMAN NASIONAL

Prepared by

I Wayan Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	**008/10/06**
Month		Month	Okt-06

Date	Service Description	Qty	Amount
30/10/2006	Office Rental & Maintenance		Rp 650.000
30/10/2006	Computer & Printing Facilities		Rp 450.000
30/10/2006	Equipment Maintenance		Rp 150.000

TOTAL AMOUNT	**Rp**	**1.250.000**
DEPOSIT		
TOTAL SHOULD BE PAID	**Rp**	**1.250.000**

YAYASAN PECINTA TAMAN NASIONAL

Prepared by

Hermanus de Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	**009/10/06**
Month		Month	Okt-06

Date	Service Description	Qty	Amount	
30/10/2006	Salary drh.Yenny Fildayani		Rp	2.000.000
30/10/2006	Salary Marini Budiarti		Rp	1.500.000
30/10/2006	Salary Kasri		Rp	750.000
30/10/2006	Salary Masnun		Rp	750.000

TOTAL AMOUNT	**Rp**	**5.000.000**
DEPOSIT		
TOTAL SHOULD BE PAID	**Rp**	**5.000.000**

Prepared by

I Nyoman Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To Global Mercury Project (Unido) No Invoice **010/10/06**
Month Month Okt-06

Date	Service Description	Qty	Amount
30/10/2006	Telephone/Fax		Rp 300.000
30/10/2006	Internet		Rp 200.000

TOTAL AMOUNT	**Rp 500.000**
DEPOSIT	
TOTAL SHOULD BE PAID	**Rp 500.000**

YAYASAN PECINTA TAMAN NASIONAL

Prepared by

Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	011/11/06
Month		Month	Nop-06

Date	Service Description	Qty	Amount	
30/11/2006	Office Rental & Maintenance		Rp	650.000
30/11/2006	Computer & Printing Facilities		Rp	450.000
30/11/2006	Equipment Maintenance		Rp	150.000

TOTAL AMOUNT	**Rp**	**1.250.000**
DEPOSIT		
TOTAL SHOULD BE PAID	**Rp**	**1.250.000**

YAYASAN PECINTA TAMAN NASIONAL

Prepared by

Nyoman Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To Global Mercury Project (Unido) No Invoice **012/11/06**
Month Month Nop-06

Date	Service Description	Qty	Amount
30/11/2006	Salary drh.Yenny Fildayani		Rp 2.000.000
30/11/2006	Salary Marini Budiarti		Rp 1.500.000
30/11/2006	Salary Kasri		Rp 750.000
30/11/2006	Salary Masnun		Rp 750.000

TOTAL AMOUNT	**Rp 5.000.000**
DEPOSIT	
TOTAL SHOULD BE PAID	**Rp 5.000.000**

YAYASAN PECINTA TAMAN NASIONAL

Prepared by

Nyoman Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	013/11/06
Month		Month	Nop-06

Date	Service Description	Qty	Amount	
30/11/2006	Telephone/Fax		Rp	300.000
	Internet		Rp	200.000

TOTAL AMOUNT	**Rp**	**500.000**
DEPOSIT		
TOTAL SHOULD BE PAID	**Rp**	**500.000**

Prepared by

Nyoman Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	**014/12/06**
Month		Month	Des-06

Date	Service Description	Qty	Amount	
30/12/2006	Office Rental & Maintenance		Rp	650.000
	Computer & Printing Facilities		Rp	450.000
	Equipment Maintenance		Rp	150.000

TOTAL AMOUNT	**Rp**	**1.250.000**
DEPOSIT		
TOTAL SHOULD BE PAID	**Rp**	**1.250.000**

YAYASAN PECINTA TAMAN NASIONAL

Prepared by

(Nyoman Gde Antoni)

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To Global Mercury Project (Unido) — No Invoice **015/12/06**
Month — Month Des-06

Date	Service Description	Qty	Amount
30/12/2006	Salary drh.Yenny Fildayani		Rp 2.000.000
	Salary Marini Budiarti		Rp 1.500.000
	Salary Kasri		Rp 750.000
	Salary Masnun		Rp 750.000

TOTAL AMOUNT	**Rp**	**5.000.000**
DEPOSIT		
TOTAL SHOULD BE PAID	**Rp**	**5.000.000**

YAYASAN PECINTA TAMAN NASIONAL

Prepared by

I Nyoman Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	**016/12/06**
Month		Month	Des-06

Date	Service Description	Qty	Amount
30/12/2006	Telephone/Fax		Rp 300.000
	Internet		Rp 200.000

TOTAL AMOUNT	**Rp 500.000**
DEPOSIT	
TOTAL SHOULD BE PAID	**Rp 500.000**

YAYASAN PECINTA TAMAN NASIONAL

Prepared by

[illegible] Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To Global Mercury Project (Unido) No Invoice **017/12/06**
Month Month Des-06

Date	Service Description	Qty	Amount
21/12/2006	Rental LCD Projector	1	Rp 200.000
22/12/2006	Rental LCD Projector	1	Rp 200.000
30/12/2006	Rental LCD Projector	1	Rp 200.000

TOTAL AMOUNT	**Rp**	**600.000**
DEPOSIT		
TOTAL SHOULD BE PAID	**Rp**	**600.000**

YAYASAN PECINTA TAMAN NASIONAL

Prepared by

Ketut Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	**001/01/07**
Month		Month	Jan-07

Date	Service Description	Qty	Amount	
30/012007	Office Rental & Maintenance		Rp	650.000
30/012007	Computer & Printing Facilities		Rp	450.000
30/012007	Equipment Maintenance		Rp	150.000

TOTAL AMOUNT	**Rp**	**1.250.000**
DEPOSIT		
TOTAL SHOULD BE PAID	**Rp**	**1.250.000**

YAYASAN PECINTA TAMAN NASIONAL

Prepared by

Yosman Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To Global Mercury Project (Unido) — No Invoice **002/01/07**
Month — Month Jan-07

Date	Service Description	Qty	Amount
30/01/2007	Salary drh.Yenny Fildayani		Rp 2.000.000
30/01/2007	Salary Marini Budiarti		Rp 1.500.000
30/01/2007	Salary Kasri		Rp 750.000
30/01/2007	Salary Masnun		Rp 750.000

TOTAL AMOUNT	**Rp 5.000.000**
DEPOSIT	
TOTAL SHOULD BE PAID	**Rp 5.000.000**

YAYASAN PECINTA TAMAN NASIONAL

Prepared by

Nyoman Gede Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	**003/01/07**
Month		Month	Jan-07

Date	Service Description	Qty	Amount	
30/01/2007	Telephone/Fax		Rp	300.000
30/01/2007	Internet		Rp	200.000

TOTAL AMOUNT	**Rp**	**500.000**
DEPOSIT		
TOTAL SHOULD BE PAID	**Rp**	**500.000**

Received by

Nyoman Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	007/02/07
Month		Month	Feb-07

Date	Service Description	Qty	Amount	
28/02//2007	Design Poster		Rp	500.000

TOTAL AMOUNT	Rp	500.000
DEPOSIT		
TOTAL SHOULD BE PAID	Rp	500.000

Prepared by

Nyoman Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	008/02/07
Month		Month	Feb-07

Date	Service Description	Qty		Amount
28/02//2007	Design Brosur	1	Rp	500.000
28/02//2007	Printed Brosur	3000	Rp	6.000.000

TOTAL AMOUNT	**Rp**	**6.500.000**
DEPOSIT		
TOTAL SHOULD BE PAID	**Rp**	**6.500.000**

YAYASAN PECINTA ALAM

Prepared by

Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	**009/03/07**
Month		Month	Mar-07

Date	Service Description	Qty		Amount
30/03//2007	Final Report		Rp	5.600.000
	TOTAL AMOUNT		**Rp**	**5.600.000**
	DEPOSIT			
	TOTAL SHOULD BE PAID		**Rp**	**5.600.000**

Prepared by

Nyoman Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	**004/02/07**
Month		Month	Feb-07

Date	Service Description	Qty		Amount
28/02/2007	Office Rental & Maintenance		Rp	650.000
28/02/2007	Computer & Printing Facilities		Rp	450.000
28/02/2007	Equipment Maintenance		Rp	150.000

TOTAL AMOUNT	**Rp**	**1.250.000**
DEPOSIT		
TOTAL SHOULD BE PAID		**1.250.000**

YAYASAN PECINTA TAMAN NASIONAL

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	**005/02/07**
Month		Month	Feb-07

Date	Service Description	Qty		Amount
28/02/2007	Salary drh.Yenny Fildayani		Rp	2.000.000
28/02/2007	Salary Marini Budiarti		Rp	1.500.000
28/02/2007	Salary Kasri		Rp	750.000
28/02/2007	Salary Masnun		Rp	750.000
	TOTAL AMOUNT		**Rp**	**5.000.000**
	DEPOSIT			
	TOTAL SHOULD BE PAID		**Rp**	**5.000.000**

YAYASAN PECINTA TAMAN NASIONAL

Prepared by

I Nyoman Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	**006/02/07**
Month		Month	Feb-07

Date	***Service Description***	***Qty***		***Amount***
28/02//2007	Telephone+ Fax		Rp	300.000
28/02//2007	Internet		Rp	200.000

TOTAL AMOUNT	**Rp**	**500.000**
DEPOSIT		
TOTAL SHOULD BE PAID	**Rp**	**500.000**

YAYASAN PECINTA TAMAN NASIONAL

Prepared by

Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	**007/02/07**
Month		Month	Feb-07

Date	Service Description	Qty	Amount	
28/02//2007	Design Poster		Rp	500.000

TOTAL AMOUNT		**Rp**	**500.000**
DEPOSIT			
TOTAL SHOULD BE PAID		**Rp**	**500.000**

Prepared by

Nyoman Gde Antoni

Friends of The National Parks Foundation

Tanjung Puting National Park - Kalimantan Indonesia

INVOICE

Charge To	Global Mercury Project (Unido)	No Invoice	008/02/07
Month		Month	Feb-07

Date	Service Description	Qty		Amount
28/02//2007	Design Brosur	1	Rp	500.000
28/02//2007	Printed Brosur	3000	Rp	6.000.000

TOTAL AMOUNT	**Rp**	**6.500.000**
DEPOSIT		
TOTAL SHOULD BE PAID	**Rp**	**6.500.000**

Prepared by

I Gde Antoni