

# Impacts of Mining on Women and Youth in Indonesia: Two Mining Locations



Final Report  
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## **Foreword**

This Research Study is a product of two phases of intensive fieldwork conducted over the total period of five (5) weeks.

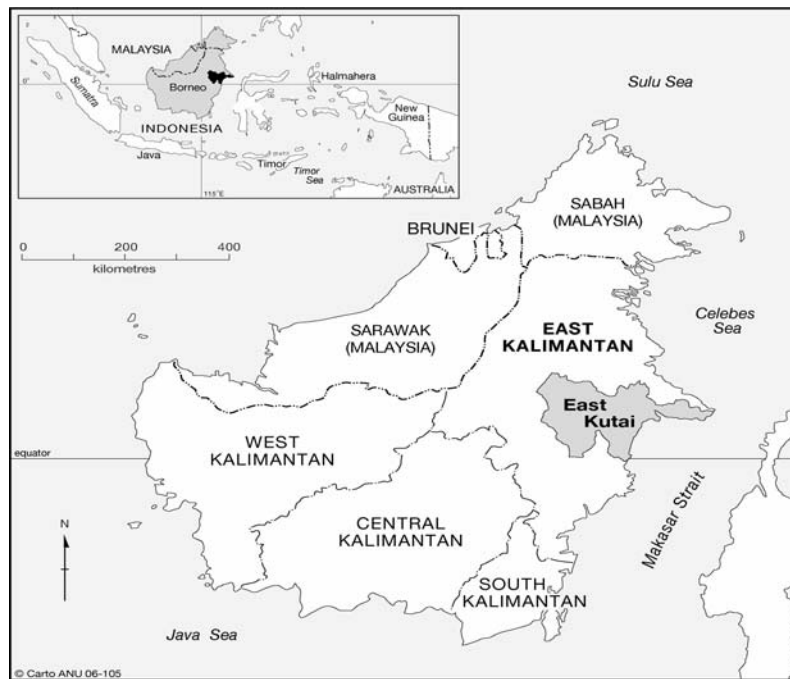
The research presented here is limited by access to data and by the duration of fieldwork.

In dealing with the issues which emerged during the field visits, we tried our best to maintain impartiality: measures include consulting a wide range of stakeholders and interest groups, be reasonably thorough in literature review and the selection of research methodology, and the maximum possible use of our own resources. However, we also obtained cooperation from the company, and hence do not claim full objectivity in this report.

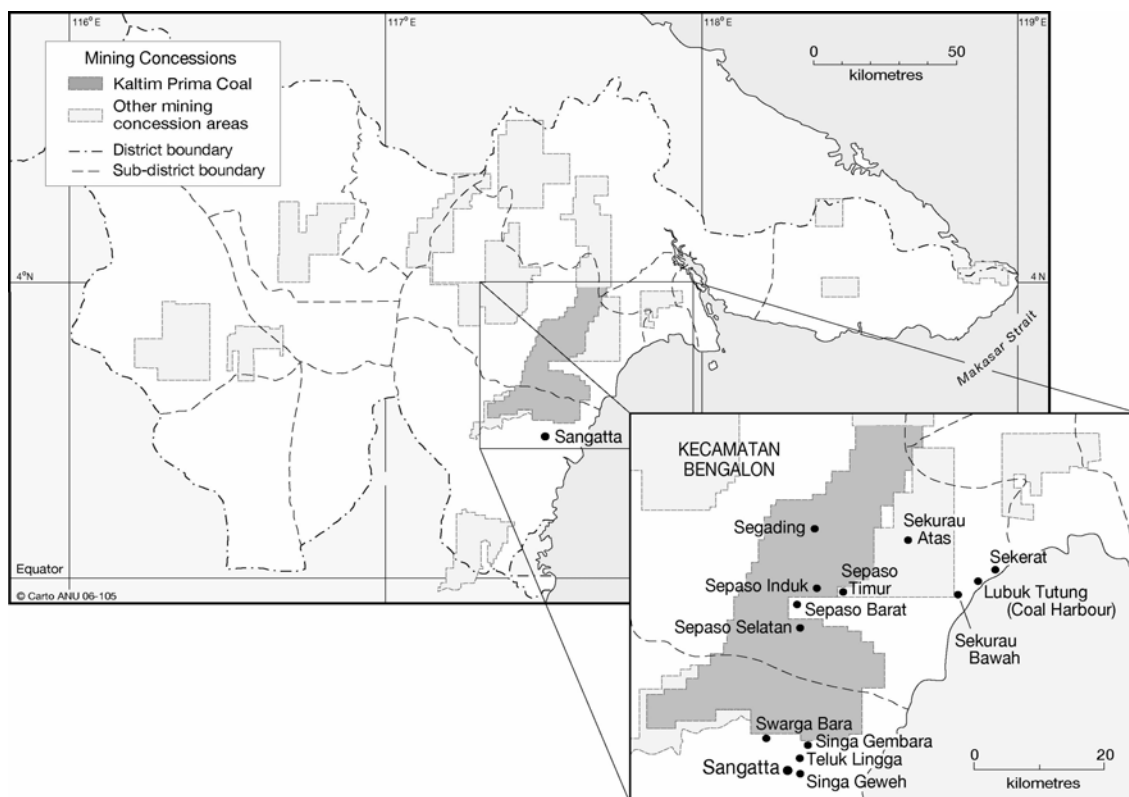
There is still great potential for further research on this topic generally and also in the locations of this report in particular.

The Research Study is funded by the World Bank. Kaltim Prima Coal provided assistance in local transport and accommodation during the fieldwork. We thank Kaltim Prima Coal community development management team particularly Mr Harry Miarsono and Mr Wijayono Sarosa and to the ground level staff members Mr Fadin and Ms Jumaiah.

**Map 1: East Kutai located on the island of Borneo in Indonesia**



**Map 2: The Kaltim Prima Coal concession area in East Kutai with locations of surrounding towns and villages.**



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## Executive Summary

This report gives an overview of the results of a research study, “Impacts of Mining on Women and Youth in Indonesia: Two Locations in East Kalimantan”. This Study is funded by the World Bank. Its objectives are to examine the nature and extent to which mining has positive or negative impacts on women and youth (both young men and young women) in Indonesia. The two locations were selected due to the Study Team’s familiarity with and knowledge of these locations. These are the areas of Sangatta and Bengalon in the district of East Kutai adjacent to the coal mining operations of PT Kaltim Prima Coal (KPC), the largest coal producing mine in Indonesia.

The report is based on fieldwork in two visits over the period of five weeks: The first fieldwork occurred in November and December 2006 and the second in the second half of January 2007. Data collection was based primarily on a series of personal and focus group interviews supported by local census data and tables from the Human Resources Division of KPC.

Taking ‘women’ and ‘youth’ as our starting points, but allowing for differences of class, livelihoods, ethnicity, education levels, geographic location, age and other background factors, A range of impacts resulting from the mining operations have been identified.

The **general impacts** for both women and youth include: influx of migrants and resultant urbanisation, and an overall higher standard of living; more roads, schools and health care centres/facilities; increase access to training and better employment opportunities. However, as we found in the study, these changes have neither affected the women and men equally, nor have they affected all women in the same manner. In most cases, the winners have been those with better education or economic power and acumen enabling them to cope with the changes and reap benefits from them.

The **specific positive impacts on women** are related to increased economic opportunities: the jobs in mines, businesses catering to the mine and its employees, and services growing around the mine. These impacts are especially evident on **youth** as they aspire for better futures within the region.

The **negative impacts on women** are related to decreased opportunities from land-based livelihoods leading to a lowering of women’s status within the family and society whilst increasing their work burdens. In urban areas, the changes in overall economic structures mean increased crime and violence in the community, alcoholism and decreased family cohesion, violence on women within the home and on streets as an expression of frustration from being unable to cope with the changes. Negative impacts were often specific to a particular person or group and included the increase in the cost of living, the lack of direct employment opportunities in the mine for women and their resulting dependency on male relatives, environmental impacts (dust and water), loss of agricultural land and resources and the failure of compensation to ensure sustainable alternative livelihoods, and women’s lack of decision-making power at the community level. **Young people** with unfulfilled expectations regarding employment and income are drawn into drugs, brothels and crimes.

In summary, the positive impacts are evident on only a limited number of women and youth are trickled down to the woman through the male members of their families except for those of direct employment of a woman in the company. The youth similarly benefit from mainly their fathers but it was apparent that women’s economic empowerment had greater effects on younger generation. Limited economic opportunities and being left outside the reach of the community development outreach.

Recommendations are made for enhancing these positive aspects of mining and for mitigating these negative effects. These include:

- Creating economic opportunities *specifically* for women through a range of specific actions: jobs, education, training, and credit, and health and sanitation are foremost amongst them.
- Sensitising mining professionals to gender impacts, needs and potentials in community development.
- Increasing job opportunities for youth through on-the-job training.

# 1. Introduction to the Project and its Objectives

This Research Study was commissioned by the World Bank. Its terms of reference are to examine the nature and extent to which mining has positive or negative impacts on women and youth in two mining sites in Indonesia. This research also seeks to identify potential sets of measures that could be undertaken, in what ways and by whom, to firstly increase and enhance the positive impacts on the community, and secondly, to reduce and or/mitigate the negative impacts.

Many social impact studies have been conducted on the effects of mining, particularly of large-scale mining, around the world. Many of these studies emphasise the role of mining companies as harbingers of capitalist transformation in the developing world. A mine necessarily brings and spreads advanced capitalist modes of economy which cause great social transformations in the area local to the mine, including urbanisation and modernisation. These globalised and capital-intensive mining projects are well-known for changing the social and cultural fabric in the areas of their operation all over the world.

Consequent to these changes, new power equations come into existence, changing the gender<sup>1</sup> roles amongst the people living in mining communities. Large scale mining has a distinctive masculine culture, and is often so conventionally masculine that people rarely think to question it. Mining is widely seen as tough and dirty and therefore as men's work. Contemporary mining workforces are overwhelmingly male, in both industrialised and developing nations. As mines are usually the single dominant employer in an area and employ mostly men, this combination of capitalist transformation and the introduction of a masculine form of modernity profoundly affects gender relations and family life in mining communities. Where men dominate the labour market to such a strong degree, women become forced to rely on men for their economic survival, usually either as wives or prostitutes. Stereotypes of gendered divisions of labour are made and constantly reinforced in large-scale mining operations.

Studies of mining and gender have consistently focused on the negative effects of mining on women's wellbeing and livelihoods, beginning with the lack of employment opportunities in mining for women and their being forced to find employment in socially humiliating and unprotected positions such as prostitution. These studies often describe the loss of agricultural land and livelihood resources for those people living at subsistence level, and the decreased ability of women to work on remaining land due to male absenteeism. Detrimental environmental effects often fall more heavily on women. The studies show that women are often excluded from negotiations between community and mining company that might increase benefits. It is difficult for women who have little political authority to be able to influence how the mine influences them, and often it is only men who are paid compensation money because of assumptions about land ownership, the identity of the head of the family and household resource allocation. Women are also often adversely affected by loss or changes to traditional culture, particularly that values women's productive work and their status as decision-makers and land-owners. Additional factors found to have been indirectly caused by mining include increased male alcoholism, transitory marriages or relationships, increased prostitution, the spread of sexually transmitted infections, sexual harassment against women and domestic violence.<sup>2</sup>

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<sup>1</sup> Gender refers to the social roles, status and relations of women and men, as opposed to biological differences based on sex. These roles are assigned, the status of individuals and groups are determined through culture, and the relations are learned socially. Thus, people born as men are expected to behave in a certain way and those born as women are expected to follow certain other norms in society.

<sup>2</sup> See for example, Kuntala Lahiri-Dutt (1999) 'From gin girls to scavengers: Women in the Raniganj coalbelt', *Economic and Political Weekly*, Vol. XXXVI, No. 44, pp. 4213-4221; Nesar Ahmad and Kuntala Lahiri-Dutt (2007) *Engendering mining communities: Examining the missing gender concerns in coal mining displacement and rehabilitation in India*, *Gender, Technology and Development* (forthcoming); Andrea Rachelle Griffiths, "Gender, Mining and Environmental Assessment in Northern Canada" (Unpublished Masters paper, York University, 2003); Martha McIntyre, "Women and Mining

These studies, while worthwhile, have only provided information on the negative effects of mining on women. Few studies have allowed that there may also be positive effects that women may enjoy from mining. Nor have any of these studies, to our knowledge, described particular impacts that may affect different age groups such as youth.

Another problem with many of these studies is that they have taken 'women' to be a stable category of analysis. It is difficult (or even undesirable) to use a sweeping terminology such as 'women'. This is because women are differentiated widely in their characteristics of class (incomes by self and family), race/ethnicity/caste, geographical location, social standing, education levels, age/generation, life history and other criteria. Often these make great differences to an individual's experiences, making it hard to generalise 'women's experiences' of mining.

Using the category 'youth' runs into the same problems as 'women'. To assume that 'youth' experience the world in the same way due to their similar young age, would be to ignore the differences of gender, class, ethnicity, education levels and so on. One category of youth will not adequately cover the range of experiences and differential impacts of mining on young lives.

To avoid this trap of overgeneralisation, we have taken a cross-section or 'intersectionality' approach to our research that incorporates these categories of difference. This has also been coupled with a good selection of individual stories to show the diversity of impacts within the two mining locations.

'Impacts' can be categorized in different ways: social or economic, empowering or disempowering, differences can be examined within certain population categories: genders, classes, locations etc. Here, we have taken gender and age differences as 'given', and tried to identify specific impacts.

Of these factors, economic class is probably the most important factor in determining the impacts of mining on women and youth. As in many other situations, poverty accelerates and enhances inequalities in bearing the impacts and reaping the benefits of change. Those who rely on subsistence production and environmental resources for their livelihoods are more vulnerable to any negative changes brought by mining than those people, and their children, who have professional vocations or run businesses. Education levels often go hand in hand with economic class and determine one's employment prospects within the mining economy. Where a person lives, how geographically close they are to the mine, is also a critical factor that we taken into account in this research.

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Projects in Papua New Guinea: Problems of Consultation, Representation, and Women's Rights as Citizens," in *Tunnel Vision: Women, Mining and Communities*, ed. Ingrid MacDonald and Claire Rowland (Fitzroy: Oxfam Community Aid Abroad, 2002); Julia Byford, "One Day Rich: Community Perceptions of the Impact of the Placer Dome Gold Mine, Misima Island, Papua New Guinea," in *Tunnel Vision: Women, Mining and Communities*, ed. by Ingrid MacDonald and Claire Rowland (Fitzroy: Oxfam Community Aid Abroad, 2002); K Bhanumathi, "Mines, Minerals and PEOPLE, India," in *Tunnel Vision: Women, Mining and Communities*, ed. Ingrid MacDonald and Claire Rowland (Fitzroy: Oxfam Community Aid Abroad, 2002); 'Atu Emberson-Bain, "De-romancing the Stones: Gender, Environment and Mining in the Pacific," in *Sustainable Development of Malignant Growth? Perspectives of Pacific Island Women*, ed. 'Atu Emberson Bain (Suva: Marama Publications, 1994).



## 2. Local context

Every mine is different, and every mine's effects are different depending on the specific local, regional or country contexts of history, economy, society, culture and geography. The entire eastern region of Kalimantan, Indonesia, is undergoing an economic boom driven by resource extractive industries: petroleum, natural gas and coal being the most important of them. This economic buoyancy has led to a rapid rate of urban growth, fuelled by migration from other parts of the country, and a gradual erosion of traditional modes of livelihood. This research, however, is set in the local context and may reveal characteristics that may be translated in policies at the national level, carefully allowing for local specificity. This section of the report describes, in broad terms, the local context of the two research sites.

The two locations selected for this research are adjacent to the mining pits within the mining concession area of Kaltim Prima Coal (KPC), the largest coal mining company in Indonesia. Located in the district (*kabupaten*) of East Kutai in the province of East Kalimantan (Map 1), KPC and its contractor companies operate one of the largest open-cut coal mines in the world. KPC is the foremost contributor to the East Kutai economy, through royalties paid to the local government, economic spin-offs and its community development contributions. However, the mine operations are located almost on the equator, in extremely sensitive ecosystems with a great amount of bio-diversity. This ecology once supported traditional livelihoods of Dayak groups, the slash and burn cultivators, farming or fishing-based Kutais. These communities were not necessarily entirely gender equitable in the modern sense of the term, but women certainly had equally productive roles. It is also a fact that changes in the local ecology were initiated before the advent of mining; the region has a complex history of logging by a timber company, petroleum exploitation by the state-owned company, and transmigration of mainly Javanese communities.

KPC runs completely mechanised operations employing blasting and GPS operated trucks and excavators. The mines operate 24 hours per day all year round. KPC signed its Contract of Work with the Indonesian government in 1982 giving it the right to exploit the coal within the 90,000 ha concession area until the year 2021. KPC was originally jointly owned by international resources giants Rio Tinto and BP, but in 2003 the company was entirely sold to Bumi Resources, an Indonesian owned resources company.

Sangatta, the first location for this study, is the main area of mine operations. Exploration began in the Sangatta area in 1987 and commercial exports commenced in 1992. At the time, there were less than 200 houses of fishermen and farmers in Sangatta Lama (old Sangatta), on the south side of the Sangatta River. In nearby village of Teluk Lingga, there were less than 20 houses – mostly farmers growing vegetables. There are now a number of pits in the Sangatta area, some mined directly by KPC and some by contractor companies including PT Thiess.

The second location for this study is the Bengalon area, which is about 25 kilometres north of Sangatta. Although exploration of the Bengalon area was carried out at roughly the same time as for Sangatta, due to the lower quality of coal and the effects of the Asian Economic Crisis in the late 1990s, full operations did not begin until June 2005. KPC sub-contracts its Bengalon operations to PT Darma Henwa.

KPC's mining operations are hugely profitable, currently producing and exporting around 28 million tonnes of coal per year. KPC currently directly employs about 3600 people, including 24 expatriates. When including all contractor employees, this number is closer to 15,000 people employed. The largest contractors in terms of numbers of employees are PT Theiss, PT Darma Henwa and PT Pama Persada Nusantara.

Although not entirely reliable, general statistics are available about the district of East Kutai from 2004. These statistics show that the district has a total population of around 170,000 people. The sub-district (*kecamatan*) of Sangatta has a population of around 64,000 people, and the sub-district of

Bengalon has a population of around 11,000 people.<sup>3</sup> In all available demographic statistics for East Kutai (including village level data), men outnumber women (Figure 2, Annex 1) and far more men are currently migrating into the area than women. Men have much higher labour force participation rates than women in East Kutai (Figure 3, Annex 1). The statistics show far larger numbers of women than men as being ‘non-economically active’ in housekeeping roles (Figure 4, Annex 1).

However, the reliability of the data is open to question: this ‘official’ data is not only often inaccurate but also tends to take into account only formal work participation by women. Throughout the area, women from poorer communities are engaged in a range of productive or subsistence activities, which is sweepingly described as ‘housekeeping’.

Sangatta’s urban dominance in the region is evident; the head offices of both the company and the local governments are located there. It is accessed by road, boat and air, the services of which are operated by the company. Bengalon is relatively less accessible, and is connected with Sangatta by a well-weathered road and from the coast.

### 3. Methodology

The first phase of the fieldwork was carried out between 27 November 2006 and 19 December 2006; the second or validation phase being undertaken in January 2007. Data was gathered primarily by carrying out a series of interviews using both individual and focus group discussion (FGD) formats. The interviews followed questions in the questionnaire (Annex 3) were mainly conducted in the Indonesian language and some in English with the help of an interpreter. Complementary statistical data was also collected.

As far as possible, we attempted to interview women and youth (aged between 14 and 19) from different socio-economic groups, geographic areas, ethnicities and connections with the mining industry. Selection of interviewees has included targeting specific individuals because of their social or employment position and also simply walking into a particular neighborhood and door knocking. *Snowballing* was also used, by requesting that interviewees provide introductions to their friends and neighbors. No attempt was made to gain a statistically sound sample, but rather to gain a qualitative picture of changes that have occurred as a result of mining.

Most interviews, both individual and focus group interviews, were *semi-structured* around the prepared survey questionnaire, asking about interviewee’s socio-economic background and whether and how their circumstances had changed since mining began in the area (or since they had moved into the area). They were asked to comment on their own lives and those of women and youth they knew of. Interviewees were also given the opportunity to direct the conversation towards issues of their own concern. Additional questions were asked of community leaders aimed at ascertaining their knowledge of the community. Additional questions were also asked of parents of teenaged children. Interviewees were generally either selected because of their position in the community or at random by walking through an area and door knocking, and then using a snowballing technique to ask for introductions to their neighbours and friends. Some of the individual interviews were conducted in the presence of other people, often these people would add their comments and these were also noted down. Information pertaining to the overall numbers of people interviewed is detailed in Table 1 below.

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<sup>3</sup> Note that these figures were obtained before mining began fully operating in Bengalon and does not incorporate the large numbers of new migrants to the area in the last two years.

**Table 1: Interviews conducted**

Method of data collection	Location	Number of participants	Age group	Gender		Interviewee's occupations
Personal interviews	Sangatta: KPC Complexes	2	25 - 30	F		Mining engineer, shop assistant
		2	31 - 40	F		Housewife, Lecturer at STIPER,
		1	Unknown	F		Housewife/PKK leader
	Sangatta Lama Market	1	25 - 30	F		Market business
		1	31 - 40	F		Housewife
		2	41 - 50	F		Market business
		1	51 - 55	F		Market business
	Rudina Dalam (Sangatta Utara)	2	25 - 30	F		Housewife, housemaid
		3	31 - 40	F		Housewives (3), Housewife, shopkeeper business/leader of women's NGO
		2	41 - 50			
		1	Unknown	F		
	Singa Gembara	7	25 - 30	F		Unemployed (1), housewife (4), housewife and small business, civil servant
		5	31 - 40	F		Housewives (3), civil servant, housewife selling vegetables
		1	41 - 50			Tailor
	Swarga Bara	2	21 - 24	F		Looking for work, helps in mother's shop
		2	25 - 30	F		Housewives

Method of data collection	Location	Number of participants	Age group	Gender		Interviewee's occupations
		3	31 - 40	F		Housewife/shop keeper, insurance collector, housewife
		1	41 - 50	F		Housewife selling basic food goods
	<b>Bengalon:</b> Segading (Keraitan)	2	25 - 30	F		Housewives (one used to be farmer)
		1	31 - 40	F		Handcrafts/farmer
		1	41 - 50	F		Housewife with small business/helps husband to farm
		1	Unknown		M	Traditional leader and farmer
	Sekerat	4	25 - 30	F		Housewives
		2	31 - 40	F		Housewife, housewife and small business
		2	41 - 50	F		Former farmer, housewife
	Sekurau Atas	2	21 - 30	F		Housewife, farmer (grows vegetable)
		2	31 - 40	F		Housewife, farmer/fisherman
	Sepaso Barat	3	15 - 20	F		Workers in village office, sex worker
		2	21 - 24	F		Sex worker, kindergarten teacher
		5	31 - 40	F		Worker in village office, housewives (2), school principal, housewife helping farm
		1	56 - 60	F		Housewife
	Sekurau Bawah	2	15 - 20	F		Work in cracker/cake small business
		2	25 - 30	F		Housewife, worker assembling lunch boxes and baked cakes for PBU
			31 - 40	F		Family palm sugar business
	Sepaso Induk	2	21 - 24	F		Operator at Darma, worker in village office
		2	25 - 30	F		Housewife and vegetable garden, worker in village office

Method of data collection	Location	Number of participants	Age group	Gender		Interviewee's occupations
		1 2	31 - 40 41 - 50	F F		Housewife and catering Housewife helping run family business, rents houses; operator at Darma Henwa
	Sepaso Selatan	1 4  1 2	15 - 20 21 - 24  25 - 30 31 - 40	F F  F F	M	Housewife and run small business Housewives, unemployed, worker in village office, housewife and run small business Worker in village office Worker in village office, housewives (2), school principal, housewife helping farm
	Sepaso Timur	1 2  1 1	15 - 20 25 - 30  31 - 40 41 - 50	F F  F F		Primary school teacher Insurance agent, housewife Housewife Housewife
Focus Group Discussion	<b>Sanggata -</b>  Singa Geweh	  2 2 6 2 4	  15 - 20 21 - 30 31 - 40 41 - 50 Unknown	  F F F F F		  Senior high school student, housewife Housewife, business Housewives (5), teacher Housewives Housewives
	Sanggata Government High School	8  2	15 - 20  30 - 40	F  F	M (4)	Students  Teachers
TOTAL PARTICIPANTS : 120						

## 4. Fieldwork Findings by Location

Detailed information relating to the mine sites, interviews and findings is presented in Annex 2. Issues emerged during the field visits are summarised as follows:

### *Economic:*

- high cost of living associated due to increased price of goods following a substantial community that has built up in the vicinity of the mines;
- more employment and business opportunities available; and
- household's regular income through paid employment in the mining industry.

### *Environment:*

- loss of agricultural land;
- pollution due to dust caused by the blasting operations in the pits; and
- poor quality water supplies due to ground water contamination.

### *Social:*

- household disruptions due to blasting vibrations;
- excessive long work hours of husbands in the mine region;
- inequality between men and women in households and communities. As a result, women's capacity to participate fully in community/society is lagging;
- an apparent lack of women's participation in domestic decision-making;
- limited access to educational opportunities/options for children, including a strain on school facilities due to people migrating into the mining areas;
- growing number of prostitutes; and
- changed lifestyle – farmers to unskilled workers in the mines.

## 5. Data Analysis: Major Threads in Impacts

### **Impacts on Women**

Generally speaking, mining in the two locations has greatly altered original social and economic formations, resulting in significant changes to ways of living or livelihoods. First of all, both mining operations are conducted in highly critical and biodiverse ecology where the local population itself was rather sparse. From primary, local ecology-based forestry, slash and burn agriculture and fishing occupations, both the locations are undergoing a rapid transformation into burgeoning towns with cash-based market economies. Women, being the custodians of old customs in most local cultures, are usually at a great disadvantage in such rapid transformations. Their economic capabilities are eroded, whilst women also tend to lag behind in availing the gains in economic opportunities.

'Land' (including its resources such as forests) in many of these communities is much more than just a place to live: the land-based resources provide the main source of subsistence for the poorest families and tending to them is often the duty of women. Land in almost all cases is owned by men, and cash compensations to men only turn women into non-productive citizens. Women too internalise this changed gender role, and find themselves at a loss to cope with their lowered status. In both study locations, cash incomes have undoubtedly increased with mining – from compensation, from jobs, or from businesses – but they are mostly being accessed and controlled by men, resulting in squandering

of cash, disruptions to family life expressed in increased visits to prostitutes and taking of multiple wives or mistresses, desertion, and domestic violence.

While there are some similarities in overall risks that women face in both locations, significant differences exist in gender issues between the two locations. These are attributed to the length of presence of the mine: Sangatta, the older one of the two settlements, has a different set of gender issues than Bengalon where mining has started to expand in the last five years or so. In Sangatta, the major impacts are related to poor education and training of women as compared to men, spread of prostitution, increased family disruption and domestic violence, poor water and sanitation facilities, poor health and the spread of sexually transmitted infections. In Bengalon, the lack of voice or presence of women in formal decision-making public spheres is expressed in their inability to reap benefits from or retain land compensation monies, and increased domestic burdens of providing subsistence for the family, keeping them away from the market opportunities.

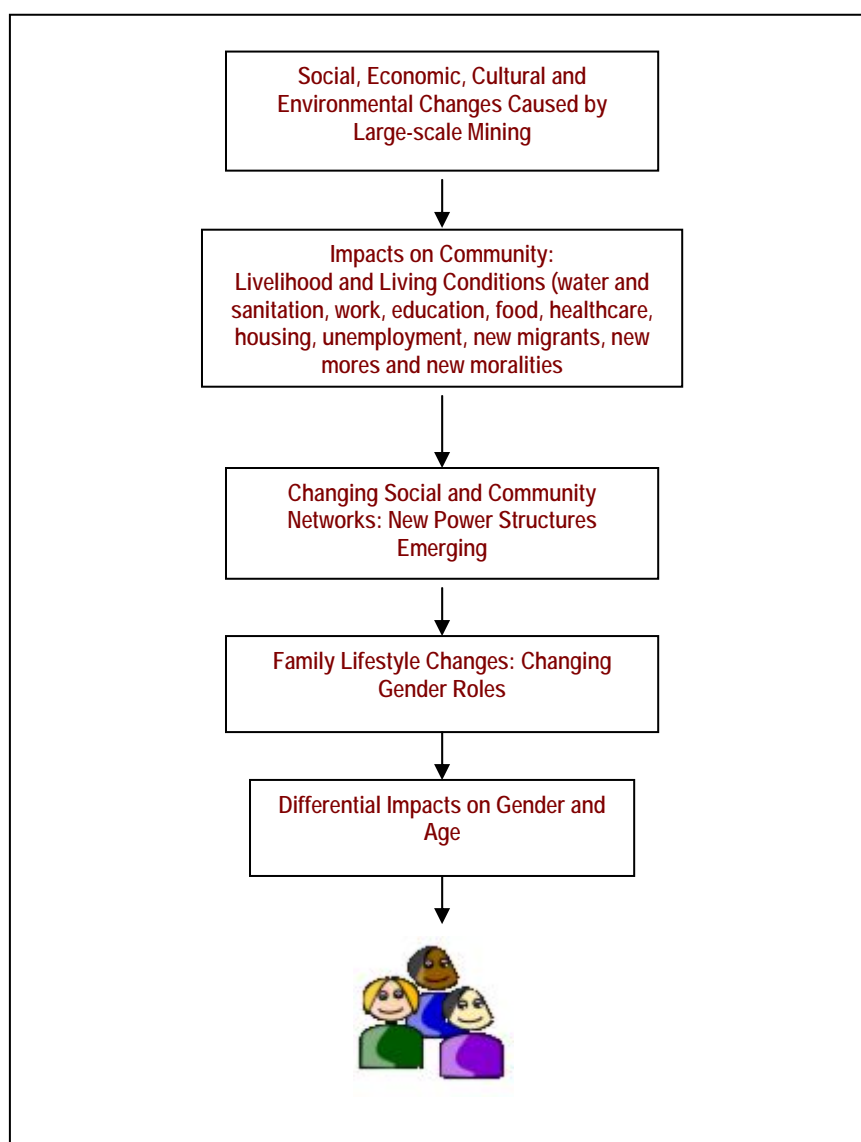
The overall positive impacts of mining are mainly connected to the buoyant economy and its resulting benefits of employment and business opportunities and improved education, health and transport facilities. However, the ability of the individual to use many of these opportunities depends upon the comparative advantage a person has within the family and society. This advantage is related to how power equations get re-arranged within households and communities; women are at a greater disadvantage than men in this power equilibrium. Men tend to be given formal job opportunities while women have to be satisfied with some informal economic activities, if at all. Amongst women, those who started at higher base of education, exposure to the outside world, entrepreneurial ability have coped better than those without these attributes. Also important amongst the ancillary factors in determining the 'winners and losers' amongst women are family size, number of children and the family's support network in allowing the woman to work outside of home. Often women from migrant communities have usurped the economic opportunities, mainly the jobs and businesses, but they also lack local support networks. Again, there are examples of many migrant women from extremely poor backgrounds who have been able to obtain a livelihood in the growing markets.

In general, the negative gender impacts of mining are related to the 'shifting power equations' within communities and families. These are often specific to a particular person or group and included increased cost of living, lack of direct employment opportunities in the mine for women and their resulting dependency on male relatives, environmental impacts (dust and water), loss of agricultural land and resources, the failure of compensation to ensure sustainable alternative livelihoods, and women's lack of decision-making power at the community level. Many women are aware of their poor bargaining power and have felt the need for legal assistance.

An interesting observation was that one dimension in determining the winners and losers amongst women and men is their geographical distance from the mining operation. In general physical proximity to the mines – leading to the direct experience of noise and vibrations, and the visibility of gigantic machines arousing fear and sense of insecurity – leads to a heightened sense of negative impacts especially amongst women.

It is apparent that women in these two mining locations in Indonesia, as in other developing countries, are enmeshed in a chain of disadvantage leading to their disempowerment. In this chain, impacts on the broader region are gradually narrowed down to the individual woman as illustrated in the following diagram.

## Chain of Disadvantages for Women in Mining regions



## Impacts on Youth

For young people living in mining regions, the impacts are usually associated with the relative prosperity or the decline in incomes of their families. For the younger members of the families of the original inhabitants, new opportunities are opened as they grow up, and the attitude towards the mine operation depends on whether the families have benefited or not. Lack of economic opportunities lock them into extreme poverty in the middle of riches and cash-flow all around, the resultant frustration often driving them to drugs, illegal activities, gambling and supporting conflicts with the company.

Many of the young people in our study locations were born after the mining operations began, or after their parents migrated to the mining regions in search of better opportunities. They grew up with better access to education on urban way of life and modern forms of communication (including media). These facilities have raised their expectations of the mining company, which often seem to represent the State. At the same time, young people from the ethnic communities feel that their culture is important to them in forming their identity, and that mining operations destroy vital elements of that culture. Therefore, on the one hand young people value protecting their traditional ways of life, while on the other they are the first ones to favour modern modes and accessories of living, resulting in a serious value conflict.



The young people in our study locations are entering the new economic system, experiencing a new education system, and seeing the expansion of market-based life along with their parents. Insecurity and lack of financial security undermine their capabilities. It is of crucial importance to keep them engaged and involved, and enable them to get the benefits in an environment of uncertainty and distrust, the gap between expectations and the opportunities leads to risk-taking propensities and anti-social behavior trends.

Measuring youth employment and unemployment rates in the two research locations was beyond the scope of this study and there are no reliable statistics kept on the issue. Any statistics would have to take into account the large numbers of people still moving into both Sangatta and Bengalon in search of work. KPC records show that it has received over 4000 applications for just 40 operator positions.

The impact of mining on youth must also take into account KPC's community development programs aimed specifically at young people. It provides school scholarships at all levels of the schooling system including a few university scholarships. It also provides mechanic apprenticeships and supports a youth business enterprises program. A recent World Aids Day event was aimed particularly at young people living in Sangatta.

It is our view that many mining jobs actually need 'training' rather than education: lowering of hiring standards can go a long way towards building more confidence amongst the young people. Other means of communication and empowerment are also advisable: building sports facilities for young people, organising competitions and games, selecting younger people from local ethnic communities for scholarships and other incentives may be some of the useful measures.

## **Major recommendations/possibilities**

It was clear that the dividends and rewards from mining are highly gender-skewed, causing or furthering gender inequity in social, economic and political power. In view of the research results, two possible solutions are recommended at the policy level for enhancing the positive impacts of mining on women, and for mitigating the negative effects. These should be feasible for adoption within a reasonable timeframe, and are able to yield observable and measurable results.

### **Broadly:**

**Create economic opportunities *specifically* for women:** Women's economic empowerment appears to be the most useful intervention to create a more gender equitable development in mining regions. This is because increased labour force participation and earnings can reduce poverty, hasten economic growth for the community, and better investments in children's health and education.

Economic empowerment of women can be encouraged in two ways: by empowering women to *better compete in the new market economy*, and by *making the market itself work towards supporting women*.

The first can be more easily done by:

- making women more able to formulate strategic choices,
- enabling women to control more resources at the family level, and
- making it possible for women to have more decision-making power.

Some gender equity measures may go against ‘local cultures’, which is used as a weapon by community leaders to thwart the mining company taking gender issues seriously. It is important to remember that local or indigenous communities, ecosystem-dependent peoples, are not necessarily gender equitable and it is up to the mining company to take the gender issues up sincerely.

In case of resistance by local communities, it is important for the company to use tools such as gender sensitisation workshops or sessions as part of community consultation and participation. Some of these sessions can be undertaken as ‘gender role play’ to sensitise the community men and women in a less overt manner. Use of role models or using key women with leadership and communication ability as agents may also be useful.

**Sensitise mining professionals:** Gender and Development (GAD) courses need to be introduced in mining engineering departments and courses to provide up-to-date concepts, tools and approaches in making mine-related development more gender equitable and in tune with international commitments. This will also help immensely in lessening the burden of the ‘masculine’ image of mining as an area of work, in turn enabling the younger generation of mine managers to be more sensitive to their responsibility to the women and men in the community.

**Specifically:**

The specific measures can be classified into two categories: intra-company and measures for the community.

**Develop Good Gender Practices Within the Company:** The employment structures of mining companies, like any other business, reflect the existing social mores that come to dominate the culture and philosophy of economic intervention. They themselves need to change internally: and for this, an *in-company gender audit* may reveal where women are placed as compared to men within the organisational structure. This audit may then be followed by the development of a set of *gender equity and diversity principles and policies* in consultation with staff. For this, *gender sensitisation programs* may need to be undertaken for the staff and eventually made mandatory as part of the induction process. As we note in our report, mine managers seem to have poor awareness of the gender impacts of the operations they run. Good gender practices within the company and sensitisation programs within the company would help to heighten the overall gender awareness.

Community development initiatives, interventions and projects are often run by mining engineers with less awareness of social, cultural and economic welfare issues than project management. It is necessary to hire gender specialists in these departments.

**Take Specific Gender Measures for the Community:** A range of measures can be undertaken *prior to the beginning of mining operations* beginning with the incorporation of gender analysis (of roles and status of women and men) in baseline surveys and social impacts assessment. *Continuing measures* such as assessing the gender impacts of policies and projects – such as in monitoring and evaluation exercises of projects –also need to be undertaken.

For mining related development to be more gender equitable and sustainable in the longer term, we prescribe the following measures in dealing with the **community**.

**In Land Compensation and Consultations:**

More gender selective and sophisticated means of compensating local communities so that women are not left behind – this would involve involving women in all stages of consultation, in making their presence mandatory during compensation, in encouraging women to participate and to give more inputs in the consultative meetings.

**In Community Development Operations:**

Locating and re-equipping the casualties of mining through gender selective training and support programs. During the project cycle, asking questions such as: is the project design based on a real understanding of the needs of women and men, are the results needed by the women and men, how

would the project benefit the most disadvantaged groups in the community, are the data gender segregated will the project contribute to the empowerment of both women and men – these will begin to give a gendered picture of who gains and who loses from these projects operating within the community.

Gender mainstreaming in community development projects in mining areas essentially means addressing these questions in projects. Gender can be mainstreamed through several specific measures:

- putting in place female-owned business and farms in the supply chains;
- providing business start-up grants to women;
- providing credit and financial services to women;
- supporting self-help groups of women;
- encouraging joint titling of land;
- promoting women's employment (including part-time work, home-based work and work in the mine offices and pits);
- removal of discriminatory legislation limiting or restricting women's work;
- providing training to women;
- providing child care;
- undertake results-based initiatives;
- supporting and financing local women's groups and NGOs in local natural resource management;
- providing infrastructure to lessen women's burden of domestic chores (such as those related to fetching water) and to improve women's access to markets; and
- undertaking policy-relevant research on gender.

## **6. Ways Forward**

The Research Study has identified a range of positive and negative impacts of mining which affect the groups and individuals within the mining area differently. While some impacts of mining can be seen to affect 'women' and 'youth', one should avoid making sweeping generalisations about them. Positive impacts do not necessarily reach all members of the community, or all members of a group, to the same extent. The same is true of negative impacts. Thorough awareness of social difference in a particular location, be it gender, class, ethnicity, age, education levels and combinations of these, is an essential starting point for action.

The positive impacts observed include the following:

- rise in the standards of living which has benefited owners of leased properties
- enhanced economy and business opportunities
- new direct employment opportunities for many
- new indirect employment opportunities for many
- greater ability of families to afford education for their children
- generally better educational facilities, and better access to education for girls in particular
- opening up roads to remote areas
- compensation used for providing alternative livelihoods (in some cases)

The negative impacts found include the following:

- rise in the cost of living which is particularly a burden for those without employment in the mine or other business benefits
- direct employment in the mine given mostly to men, and more specifically to younger men
- limited employment opportunities for women
- wives' dependency on husbands' wages
- dust, water pollution and increased flooding
- scarcity of natural resources (particularly water) caused by in-migration
- loss of agricultural land and the ability to produce on remaining land
- deer have moved further away since mining began
- compensation used up or wasted and not providing alternative livelihoods (in many cases)
- women often having little say in the use of compensation money
- limited decision-making power of women at the community level

This Study highlighted the need for further work to examine the opportunities and constraints relating to the mining in East Kalimantan.

# Annexes

## ANNEX 1

### Demographic Statistics for East Kutai

Figure 1

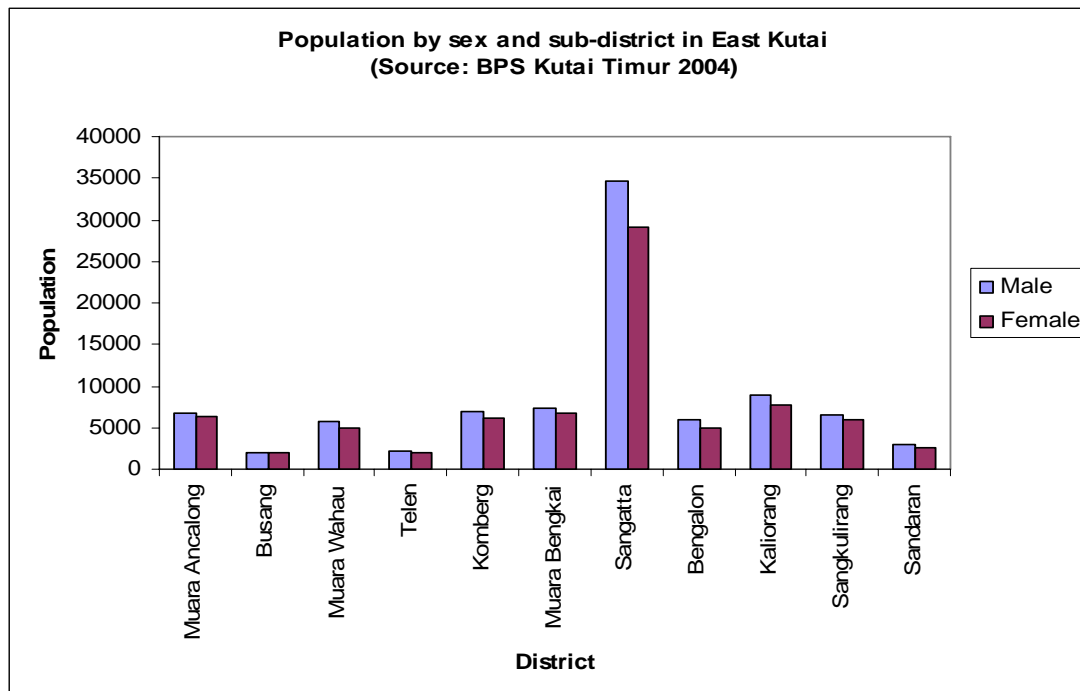
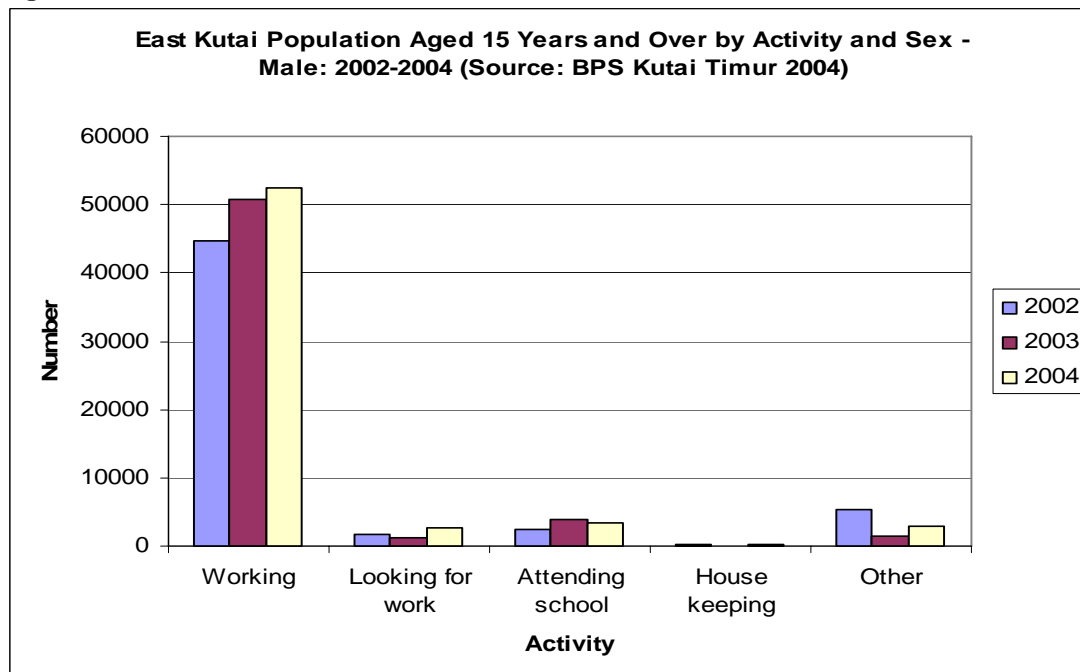
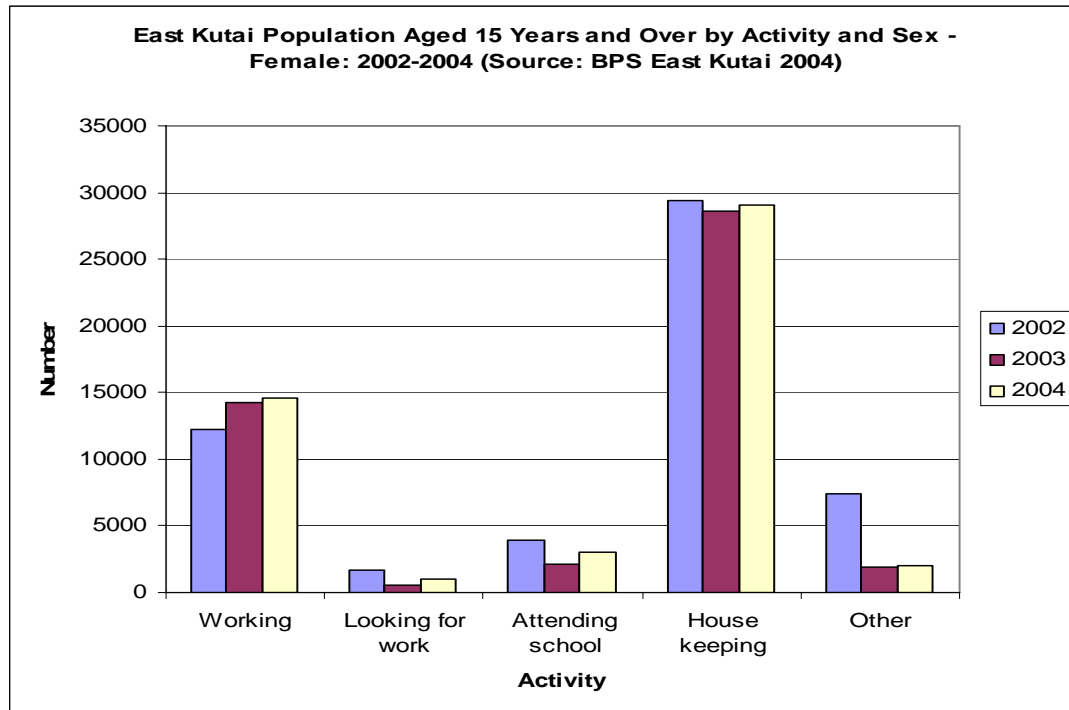


Figure 2



**Figure 3**



## ANNEX 2

### Findings by Location

#### *Location 1: Sangatta*

Prior to KPC, Sangatta was a sparsely populated and almost completely undeveloped area. Some local farmers of Kutai ethnicity practiced shifting cultivation along the banks of the Sangatta River. Access to the area was by boat, or by helicopter for company exploration teams. Pertamina, the state oil company, began operations on the south side of the Sangatta River in the 1967, and some Porodisa logging company workers were also present in the general area. For local communities, *ketintings*, small boats containing only about five people, were the main transport.

However, it was not until the mine began construction that large numbers of migrants began to arrive in search of employment, and processes of urbanization began. KPC built company housing complexes in the Swarga Bara and Tanjung Bara areas, and other areas built up spontaneously along the main road. Sangatta has quickly grown into a medium sized town and the great majority of its inhabitants are migrants or the children of migrants. Consequently there is a wide mix of ethnic groups, with many people having migrated from Sulawesi, including Torajans and Buginese. There are also many Javanese, Banjarese, Florenese and the local Kutai and Dayak groups. Many migrants followed family members or neighbours who reported back that work and business opportunities were available in Sangatta.

In the early years of its operations KPC acted in a quasi-government role, however, Sangatta is now the seat of the district government, established in 1999, when the larger district of Kutai was subdivided into smaller districts. KPC is still looked to as a source of community development projects and community expectations are high.

Sangatta consists of a number of neighbourhood areas, divided according to the administrative system of Indonesia into villages (*desa*), sub-villages (*dusun*) and neighbourhood associations (*Rukun Tetangga (RT)*). Interviews were conducted across a number of different geographical areas of Sangatta, including those areas in the north closest to the mine site, that is, Singa Gembara and Swarga Bara, as well as areas further away, Sangatta Utara and Singa Geweh (See **Map 2**). Interviews were also conducted at the Sangatta Senior High School.

#### *Singa Gembara*

Singa Gembara village is located close to Pit J which KPC currently contracts to Theiss. The majority of residents in this area are from Toraja in Sulawesi. This village has recently seen demonstrations against KPC and Theiss where the villagers, men and women, demanded compensation for damage to their houses because of blasting vibrations. In response, KPC and Theiss have promised a great deal of help to the village to improve roads and facilities and repair the damage. This is still a sensitive issue. Last demographic data (2005) shows a population of around 4,060 people.

Thirteen women, of Torajan and Buginese ethnicity, living in the village were individually interviewed. They were aged between 27 and 43. Their time of residence in Sangatta ranged between two months and 15 years. There was some degree of similarity in the stories of the women interviewed in Singa Gembara.

Their parents in Sulawesi were mostly farmers or small traders. Many of these women, while still single, had once worked in plywood factories in Samarinda before marrying and following their husbands to Sangatta. In Sangatta, the majority have become housewives, while their husbands work for KPC or its contractor companies.

The blasting vibrations from Pit J was a major complaint of the Singa Gembara residents. They would prefer the intensity of the blasting to be decreased in order to prevent further damage to their



houses, and the disruption to themselves and their children that it causes. For community women the noise, blasting and dust associated with the operation are sources of anxiety and concern for the safety of family and children.

Clean water is also an important concern of the women in Singa Gembara. This is not a direct impact from the mine, but more the effect of the unplanned housing development in an area without a clean water source. Water is currently delivered by KPC contractor companies as part of their community development programs, and the women wait in line for many hours for this water every day, and sometimes miss out. The government is said to be planning to eventually bring in piped water to the area. Water does flow out of Pit J and this is used by fresh water fish farmers, and while fieldwork was being conducted a complaint was lodged that the water had caused the fish to die due to low pH. This was still being investigated by the company.

Despite these complaints, the women are happy that they are living easier lives than back home in Toraja with better educational opportunities for their children, although they are nostalgic for Toraja's clean water and air.

### *Swarga Bara*

Swarga Bara is also located close to the mining operations. Swarga Bara has a diverse population. It is home to KPC offices as well as KPC's main housing complexes, including Panorama, Bukit Batu Bara and Bumi Etam as well as more village type housing areas. The population of Swarga Bara has been estimated at around 8,500 including approximately 1000 people who live in the KPC housing complexes. Some of the houses in these complexes have been sold or are rented to non-KPC people, as they are desirable given their location and access to amenities. Some of the land in Swarga Bara has already been mined.

In Swarga Bara, 15 people were interviewed. Eight of these interviews were conducted in the Kabo Jaya *dusun* with women aged between 21 and 42. This area is out past the old Porodisa logging company camp and some distance from the KPC housing complexes. The first people to move into the area were Porodisa employees. Many of these people have now become mine employees. Those people who are now growing vegetables in the area are said to have moved in from the transmigration area of Rantau Pulung. Many young women from this area work as housemaids in the KPC housing complexes.

The women interviewed were generally positive about mining. However, their responses were mostly connected to their husband's employment experiences with the mine. The majority of those women interviewed were housewives without their own income, and are highly dependent on the husbands for their livelihoods. Those whose husbands are permanently employed are positive about the effects of mining on their lives. The negative effects of this were apparent where the husband was unemployed and his family were dependent on his ability to find new work. Those people who have tried and failed to find work tend to think of the mine more negatively.

Transport is a problem for the residents of Kabo. Those without private vehicles can catch rides with KPC employee buses or take the occasional public minibus into town. Minibuses however prefer to avoid the gravelled and potholed road and sometimes there is a long wait for them. Often it is women who are most disadvantaged by this, as they are the ones more likely to be going into town to sell vegetables or shop. On the day of the interviews many of the villagers were demonstrating outside the district head's office demanding that the Bupati keep his promise to seal the road from Kabo to the main road of Sangatta.

Water is also a problem in the area for those without their own wells. Water can be collected from the Sangatta River, but must be treated before use. Otherwise it can be bought by those who can afford it, or begged from people who have wells. The collection of water in Kabo does not appear to be determined by gender, but is done by both men and women according to their family circumstances.

Unemployment in the area is difficult to gauge. Although the mine provides employment, more people are continually coming in search of work from the Rantau Pulung transmigration area and from elsewhere. Young people are said to be fussy about the kind of employment they undertake, while older people are less worried about status and will do more menial work.

Interviews were also conducted in the KPC housing and shopping complexes in Swarga Bara. Those living in KPC housing tend to be affluent and well educated. We obtained a range of different responses, showing that women's experiences in these areas are diverse, although all agreed that they were financially better off living in Sangatta than in their hometown. Complaints of mining from those interviewed included dust and related health concerns and social exclusivity amongst mine managers.

The pattern of married women becoming housewives once they come to Sangatta is seen even amongst these more affluent interviewees. However, there was diversity in their experiences and satisfaction with their lives. The two single women interviewed have found a degree of freedom, both financially and socially, by living and working in Sangatta.

### *Rudina Dalam (Sangatta Utara)*

Rudina Dalam is an area along one of the unsealed streets that lead off the main road of Sangatta. The area has a local women's group of about 40 members that has been receiving help from KPC in the form of sewing and natural dying courses. Many women here are also members of LP3KT, a larger women's NGO, whose leader also lives in the area. This area is some kilometres away from the mine and timber workshops can be seen in the area.

A total of 9 individual interviews were conducted in this area with women aged between 25 and 46. The women felt that they lived far enough away from the mine not to be bothered by any environmental effects.

There was a mix of circumstances amongst these interviewees. While one Dayak woman was obviously struggling to support her large family, a Banjarese woman told of arriving in Sangatta with her husband with nothing but they are now running a successful construction materials family business. The more successful women more readily connected the opportunities they had gained with the presence of the mine.

The poorer women here did not feel that the mine had played much role in their lives. They were more focused on the decline of the timber industry, and what that would mean for their husband's livelihoods and their own future.

One of the interviews was with Ana Wulandri Agiel, the leader of the women's NGO *Solidaritas Perempuan Peduli Pembangunan Kutai Timur* (LP3KT). She explained that the group has a membership of 570 registered members, mostly women of middle to lower class. The NGO itself is new, and has only run a few seminars for women, and a mass circumcision for boys. The NGO has so far received the majority of its funding from the government through Ibu Agiel's husband as well as some funding from KPC and from ticket sales at a children's entertainment day. Ana was quick to point out that women in Sangatta are too often dependent on their husbands. If the husband should lose his job, or take a second younger wife, then the wife and children will suffer. Wives have weak bargaining positions and often no income to fall back on.

### *Singa Geweh*

Singa Geweh is an area in the old part of Sangatta, on the south-side of the Sangatta River, in the vicinity of the Pertamina operations (the first company to move into the area and predating KPC). It has a vibrant food and goods market (biggest in the district) and is the site of the first high school to be built in the area. Most recent statistics show an estimated population of 4,000 people.

A Focus Group Discussion (FGD) with 16 women, aged between 19 and 45, from the local neighbourhood was held on 15 December 2006. Two of the women were native to the Sangatta area and of Kutai ethnicity, the rest were migrants of Javanese and Banjarese ethnicity. Only two of the women had husbands who worked in the mine, and one had an older sister who works as an operator. The majority are housewives, but there was also one teacher, two who run small business and one high school student among them. The following comments were made during the discussion:

- The group acknowledged that Sangatta was able to develop the way it has because of the mine. The two women native to the Sangatta area said that they are happy about the mining. The area used to be quiet but now it is developed, and full of activities.
- Some women are farmers, some are truck operators in the mine, but most are housewives without own incomes. Some had their land taken by the mine but it was compensated for. Compensation money was partly used to set up small businesses and household expenses, but only the few smart ones used it for trading and were able to raise their incomes. The majority of the compensation monies have been spent on consumption.
- 'We are living quite a long way from the mine, so we cannot really think of any direct physical or environmental effects from the mine' – was noted by the group.
- Transportation and access to the area has definitely improved.
- The group noted that most women are housewives in Singa Geweh. They haven't been to school, and if they wanted to work in an office they would not be able to because of their lack of education: 'We want to but we can't. We have no capital' was the main comment. Most women are busy looking after their husband and children and do not have the time to work. Some take part in PKK<sup>4</sup> and arisan<sup>5</sup>, but no-one has anything to do with politics. No one thinks about being political. The idea of running for village head is laughable. There is no Department of Social Affairs program for going back to school in this area, only across the river in the main part of Sangatta: 'We don't take part in demonstrations, what would be the point? We would just get tired and bothered for no outcome. We are neutral. We usually just keep quiet, we have to think of the cost of transport and fuel and who will mind our children.'
- The cost of living is increasing here. Women expressed the hope that the government will lower the costs of basic foods and bring back the fuel subsidies. The cost of sending children to school is expensive, and although the schools are free, there are still the costs of books and school uniforms and living.
- Our health needs are more or less met by the nearby health centres. The main problems for us are water and electricity. There are frequent power cuts in the town. The roads are better than before. Water depends on circumstances and whether the person has a good well or else they have to buy it. Water is an important matter for both men and women; it is collected by whoever is able, and has the time. Women manage the water within homes, and take the responsibility of storing it.
- The men with high wages often cheat on their wives by visiting prostitutes or taking younger girlfriends. If that happens wives are angry, upset and confused. Sometimes a husband will come home drunk. Most KPC workers visit prostitution areas, as do Pertamina and contractor workers.

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<sup>4</sup> The PKK or 'Family Welfare Movement' is a mass women's organisation closely aligned with the Indonesian government. Its leadership is hierarchical and usually the wives of officials.

<sup>5</sup> *Arisan* are groups, usually women only, that meet regularly and pool a certain amount of cash and which is won by one of the members by lottery.

- They hope for the capital to open small businesses. Though they acknowledge that there are already many small shops and food stalls in the area.
- Teenagers in Sangatta are often delinquent, especially boys. 'They drink and take drugs. If teenagers are given money, and their parents don't control them, do not know where they are...The difference with Samarinda is that there is no entertainment here.' It was noted by the group that many teenaged boys and girls are unemployed, especially those from migrants families. However, if KPC can employ more locals, the problems of unemployment will lessen and consequently the local people will be better off. Young people who do not have work are the main problem and are in danger of getting drug addicted or involved in anti-social behaviour.

Five women in the Sangatta Lama market were also interviewed. All five were running small businesses in the market, three were Buginese and two were Javanese. In the market the majority of people selling and shopping were women, though some men were also present. A very old woman, Kutai and one of the oldest inhabitants of Sangatta was interviewed. She noted that direct economic benefits have mostly been captured by men; even indirect ones such as servicing the needs of the growing community have also been taken mostly by men. However, she noted that women have often benefited from trickle down effects or even from farming while men have given up klooking after farms in search of cash incomes. Her grandchild, Misran (14 years), feels that there are not many jobs being offered by the company, and jobs have been taken by mainly migrants from other parts of the country.

In general, women interviews were positive about the impacts on their lives of living in a mining region because of the business opportunities available. However, all of them commented on the ensuing difficulties, such as the rising prices of basic goods in the market. However, several women use their own resources to earn extra cash; two of them mentioned that they own property which they rent out.

### *The Sangatta Government High School (SMU 1 Sangatta)*

A focus group interview was held at the Sangatta Government Senior High School with 4 boys and 4 girls aged between 16 and 18. The students were randomly selected by the school for the interview. In this case the students were asked to fill in the survey themselves while we interviewed two of their female teachers separately. Afterwards, a group discussion was held where the students were invited to talk about their lives in Sangatta and their aspirations. Four of the students had fathers who worked for KPC. All eight teenagers said that their mothers were housewives. A mix of ethnic groups in amongst those interviewed including Buginese, Kutai, Aceh and Flores.

Some were born in Sangatta. All felt at home with the multi-ethnic society that they live in. All expressed a desire to continue onto university, preferably at a good university in Java. They all agreed that having enough money would be the deciding factor of whether they are able to go to university. Their last choice is to go to university here. None of them intended to apply directly to the mining company for work, but thought that some other students might do so though probably only some boys. Girls who cannot continue their education find jobs in shops and beauty salons. To work at KPC, one must have connections. They all felt the price of basic goods in Sangatta to be expensive, especially if compared to other places.

None of the students felt that juvenile delinquency was much of a problem in Sangatta. Amongst them, they said, the worst habit was smoking. Certain individuals might drink but they themselves do not. Entertainment for teenagers in Sangatta is minimal, going to the internet café, borrowing DVD/VCDs to watch at home, hanging out with friends in the Town Hall shopping and eating area, and going on occasional trips with family or friends to Samarinda.

Their teachers explained that as there is only one government high school in Sangatta, and too many students, they must be selective. Those who get in are pleased and thankful. Students who don't pass the test must go to a more expensive private school, of which there are a few in Sangatta. Very few students drop out of senior high school once they begin - only those who follow their parents elsewhere. However, the children of the wealthy, especially those of KPC management personnel, are sent away for senior high school as Sangatta's schools are considered to be of much lower quality than those in larger cities. They get good marks at this school compared to others in Sangatta, but not if compared to other schools in bigger cities.

## ***Location 2: Bengalon***

The Bengalon area is located approximately 25 kilometers to the north of Sangatta. KPC began mine operations in the Bengalon area in June 2005. The Bengalon mining operations are contracted to PT Darma Henwa (previously called Henry Walker Eltin). The Bengalon mine pit is 22 kilometers from the coast and linked to its port facilities by a 22km haul road. Also in the Bengalon area is another non-related coal mining company, PT Perkasa Inaka Kerta (PIK), although it is still in the construction phase.

The Bengalon project is causing an economic boom in the area, which had been in a slump since the logging company Porodisa stopped business. To take advantage of this, migrants are moving in, businesses are opening, and with the greater demand for housing the costs of rent has increased. The night market is busy, which is unusual for such a remote area. Many people are building houses and shops along the main road with the proceeds of land compensation money paid by the company. KPC has taken up a policy of employing locals as far as possible in the mine. Fifty percent of current employees in the Bengalon project as a whole, including all contractors, are local to the Bengalon area.

Land compensation continues to be a critical issue in the area. The price of land has dramatically increased. Many fields are now lying fallow as they are left in preference for wages in the mine. Land speculation is rampant, and so are examples of wasting entire compensation amounts on alcohol and other ways. Before mining began, the villagers of Bengalon got together and demanded an agreement from KPC that the Company could mine in the area but would have to employ locals and provide roads, schools and clean water facilities. So far, the community development projects have only marginally involved land losers. Women have not been part of either the consultation process or the compensation-giving. There has yet to be any determined efforts by the company to rehabilitate lost incomes or livelihoods, besides resettlement and rehabilitation.

Bengalon is a large area, and so our research has been focused on six main villages that are geographically closest to the mining operations. These villages are Sepaso Induk, Sepaso Selatan, Sepaso Timur, Sepaso Barat, Segading and Sekerat (including Sekurau Atas and Sekurau Bawah areas) (See **Map 2**). Interviews were conducted in all of these village areas, and findings are detailed below.

### ***Sepaso Induk***

Sepaso was once one village. It has since been split into four villages. Together the Sepaso villages make up the main town area in Bengalon. Sepaso Induk retains the original village office. This village has the most complete records, which show a current population of 6147 (as of November 2006). Its population grew by over 560 people in 2006, of which 86% were male in-migrants.

In Sepaso Induk, 7 women were individually interviewed, aged between 21 and 44. These seven were selected mainly for their positions and occupations. We interviewed the wife of the village head, two women who work in the village office, a housewife who has a catering business and is active in PKK, a housewife who helps run a building materials shop, the former village head of Sepaso and a female mine operator.

Their responses were mainly positive and in general appreciated the changes that mining has brought to Bengalon. Those who could connect their livelihoods to the mine through a relative's employment or business opportunity were positive about the impacts of mining on their lives. One woman felt her life to be much the same as although she now takes in boarders who work for the mine, it has increased her workload and spending has increased as well. Appreciation of the Company's help in putting out house fires in the area was also raised.

Negatives raised in Sepaso Induk were increased incidence of flooding in the river caused by upstream soil erosion and deforestation. These floods cause immense difficulty for both women and men, but women suffer more – again because of the gender roles that give her the responsibility of providing food in emergency situations.

The quality of water in the river has also been affected negatively. As it is the main source of drinking water, many women commented that water must be treated now before using it for drinking purposes.

Congestion in the area caused by hectic building activity has caused water logging and poor drainage. Sanitation is extremely poor and modern latrines facilities are non-existent. For women, securing privacy has become difficult. All these have also affected the health of women adversely.

### *Sepaso Selatan*

The village office records from 2005 of Sepaso Selatan show a population of 1, 686. In this village a total of nine people were interviewed. These interviews consisted of seven women (aged between 20 and 36), one young male, and the male village head.

The women interviewed had a mix of backgrounds. Some run small businesses, others are the wives of mine workers and are housewives. Two of the younger women worked in the village office. The young man was a newly arrived migrant and still unemployed.

The responses were mainly positive about employment, the growing economy and the modernisation of Sepaso. The cost of living has gone up, but the mining is far better than the logging for providing livelihoods.

One of the women interviewed said that her life had only become more difficult due to increased prices and the inability of her husband (too old) or her daughters (unable to afford the application process) to obtain work in the mine. She was scornful of those people who obtained compensation but just wasted it or took second wives.

The young man, 21, had left his wife and child in Balikpapan to look for work in Bengalon. He has not found anything yet but is positive about the potential opportunities created by mining and the employment the mining company creates directly or indirectly. He would like to find work and then bring his wife and child to join him.

Increased flooding of the river was again a complaint made by this group. However, one woman commented that although the mine operation is generally blamed, in fact deforestation has been ongoing for a long time. She also noted that the company helps out people in Bengalon when it floods.

### *Sepaso Timur*

Sepaso Timur has a population of 1509 (from 2005 village records). In Sepaso Timur, five individual interviews were conducted with women aged between 20 and 45, including the wife of the village head.

The informants were generally positive about economic benefits, employment and the prospect of future compensation from mining.

Negatives mentioned were the problem of getting the company to fulfil its promises of fixing roads and providing clean water and the fact that men can use their wages to take another wife or visit prostitutes.

One woman in particular was outspoken in her remarks about the effects of husbands who work in the mine on their wives and children. Her comments included:

- men's work hours being such that they often do not get to know their children, or have enough time for their wives.
- compensation money for land often did not make it to wives,
- local women do not have the power to get rid of the prostitution district, and that the culture of the mine is such that men are encouraged to stray from their wives. 'They go out to drink coffee, and a child appears' she observed. Many men take second wives with the money.
- Previously, mineworker's payslips were written in English and wives could not understand them properly. If the husband was truthful then there was no problem, but if not then he could deceive his wife about the amount he earned for the month and use the extra elsewhere.
- 'There is no legal aid here, no place for a woman to go for help if she needs it.'

The mineworker husband of one of the women interviewed had recently married a younger second wife. Everyone in town was gossiping about it. She did not blame the company for this though and is positive about mining. Her only comment was that it is difficult to ask for a divorce and that it was better for her to be patient. Her three daughters and herself rely on her husband's income.

### *Sepaso Barat*

The village of Sepaso Barat has a recorded population of 2255 (2005 village records). Sepaso Barat is home to many illegal loggers and many people were concerned about the effects of the government's latest crackdown on illegal logging. According to KPC records no local people have been recruited from Sepaso Barat to work for the Bengalon operations. Sepaso Barat also has the main prostitution district of Bengalon which has an estimated 150 sex workers.

In Sepaso Barat, 11 individual interviews were held. These included interviews with three young female Javanese sex workers (aged 18 to 22), two former sex workers, the woman school principal of the junior secondary school who also runs a boarding house for mine workers and two women who work in the village office. Again those with employment or with employed relatives viewed the effects of mining positively, and those without were more ambivalent. Dust and increased flooding were again mentioned as negatives.

The school principal was able to describe the lives of her students. Very few junior high school students drop out without finishing. She said that one of the main reasons that Dayak girls drop out of school was marriage at an early age. The growing numbers of migrants and their children in the area was putting pressure on school facilities. Often the children of migrants do better at school than local children. There is also more traffic and more accidents in Sepaso, one of her students recently died in an accident.

A brothel owner said some clients do indeed come from the mine, but most are in fact illegal loggers. The young sex workers did not feel that their lives had been particularly influenced by mining and their concerns were more immediate about their lives in the brothel and how they were going to pay

their debts in order to one day leave. The former sex workers interviewed were reticent about their past but willing to talk about their new lives as housewives and being dependent on their husbands.

### *Sekerat (plus Sekurau Atas and Sekurau Bawah).*

The village of Sekerat is located on the coast, close to the coal harbour. Although on the beach, the main staple production of the village was traditionally rice growing. Fishing (by men only) was to supplement the diet. Many rice fields in the village area are now lying fallow as residents have taken up work in the mine. There are also hills around the village with big caves that support swallows nests that are sold for profit. This is the only beach in the area, and has some tourist potential and tourists have begun to visit on major holidays. The village administrative area also includes the *dusuns* of Sekurau Atas and Sekurau Bawah. KPC records show that up until October 2005, 65 local people have been recruited from Sekerat (as a whole) to work for the Bengalon operations. There is a small private junior high school in the village. The nearest senior high school is in Sepaso. It costs about Rp 50,000 to travel to and from Sepaso from Sekerat by public transport. Many migrants are moving into the area due to the mining.

In the main village of Sekerat, 8 women were interviewed, aged between 35 and 46. All but one were original inhabitants of the village. Only the one Javanese woman had been to school beyond primary school, as in the past a teacher only came to the village occasionally. Now there is a primary school and a small private junior high school. Some of the women had been involved a few days earlier in a small demonstration at a bar that had been built nearby. They successfully closed down the bar, and ran off the prostitutes who were working there. The women said that they feared that their husbands would stray if the bar remained open.

The general attitude in Sekerat towards mining was positive for the employment provided and the road that allows the men and women more mobility, increased business opportunities and better educational opportunities for children. Education for girls is now more likely than in the past. Some of the single women in the village work in catering or laundry for the mine. The younger married women described their change in lifestyle from farmer to housewife as their husbands now work in the mine. Two of the older women, however, explained that their lives are more difficult now that most of their land has been taken by the mine. Compensation money has been used up and they have to buy all of their needs now, and that means making the expensive trip to Sepaso. Only the young can get work they said.

### *Sekurau Bawah*

In Sekurau Bawah, five women were interviewed. Since mining began there are more houses in the village as people have incomes. The road is also better, it used to be very bad. The local primary school was built with the help of KPC, the local government and community funds. Some young men are unemployed in the village. Young single women tend to find work for PBU in catering or laundry.

Four of the five women were involved in home industries providing crackers and cardboard boxes for PBU, the catering company contracted by the mine. The fifth woman produced brown sugar with her family. Those women running the small businesses appeared proud of their achievements in being able to earn money and said that they are more prosperous since mining began.



**Photo 1: Young women of Sekurau Bawah packing crackers for mineworker's lunchboxes**



**Photo 2: Women and children assembling mineworkers' lunchboxes in Sekurau Bawah**



The palm sugar producer however reported that her life was more difficult since mining began. The river water is more turbid and muddy (essential for the sugar making process) and the demand for sugar has decreased and she is not sure why. In the past the whole village made sugar. Now there are only ten people producing it because many people now work for wages. Many have shifted away to be closer to the good roads. The roads in the village are still bad. She expects her situation to continue to worsen as the cost of living rises but she does not get any wages from the mine.

### *Sekurau Atas*

Sekurau Atas has a mix of Dayak and Sulawesi ethnicities. Four interviews were conducted here with women in their twenties and thirties (two of them were not sure how old they were) in the area called Sekurau Atas Dalam. One of the women's husband works for the mine, and she was able to describe her resulting change in lifestyle from farmer to housewife. She is happy with the change. For the others who are still farming they said that nothing much has changed in their lives. They did complain that the deer have moved further away since mining began making life more difficult.

### *Segading (also called Keraitan)*

Segading is a majority Dayak Basaf village very close to the mine pit. Blasting can be heard in the village. KPC has community development programs in the village and is encouraging a revival of traditional crafts as well as improving village buildings. The Dayak were moved into the area by the Indonesian government from a more remote location. No village records are kept, as the village head cannot read or write. The village was compensated for land lost to the mine, however, apparently most of the money was quickly used up by the men of the village buying motorbikes and 'buying wives' i.e. prostitutes. There was once talk of shifting the entire village back to where they originally came from to move them away from the mine, however this has not eventuated. KPC records show that five people have been recruited from Segading to work for the Bengalon operations.

Four individual interviews were conducted with women in this village, and one with the traditional leader, and onlookers also added their comments. The interviews included a 20 year old woman whose young husband works at the mine, a mother whose two sons have found work at the mine, and a long-time Javanese resident in the village.

In particular, these women described the change in lifestyle that has occurred for the young men of the village. Where once they might have hunted deer to provide an income many of them are now finding jobs as unskilled workers in the mine and earning regular wages. These young men have tended to move down to Sepaso and only come back to the village when they have leave. They still help with the farming on those days. The village has become quieter as a result.

The comment was also made that the children of the village are now looking heavier and healthier since mining began.

**Photo 3: Segading village with mine pit visible in the distance**



## Major Threads in Impacts

### *The Mine Economy*

The cost of living in Sangatta and Bengalon is high compared to other places in Indonesia. Everyone agrees that this is the case. Most people blamed three factors for this; the presence of the mines, the distance from major cities, and the Indonesian Government's recent policy of reducing fuel subsidies. The last two factors have combined to raise the cost of transporting goods to these areas. Fresh food grown locally is said to be expensive too. In the more remote areas of Bengalon, such as Segading, this is compounded by the particularly poor state of the local roads.

The mine has caused a number of changes in the local cultural and social fabric. The continual migration into the area puts pressure on housing and drives up rental and sale prices. Many people said that the cost of goods in these two areas follows the buying power of people earning high wages and standards set by KPC. Also, when mineworker wages are increased, or a bonus issued, everyone knows of it immediately and shop keepers and traders follow by putting up their prices.

Many women have benefited from this. Those able to rent out houses or take boarders and run successful businesses in the area are reaping the benefits, and we came across a number of these success stories while researching. However, those without capital and business skills miss out on these benefits and instead must cope with the higher cost of living.

*A is 46 years old, Banjarese and married with 5 children. She lives in Rudina Dalam. She finished junior high school and then married her husband who was in teachers college. The family moved to Sangatta from Samarinda in 2001 with only two suitcases. Her husband discovered that his talent lay in business not teaching, and they now run a successful sand and construction materials business. KPC is a good customer of the business. She helps with the business and runs the household. They own a house and car, and their children are doing well. One is studying at university in Samarinda and one gets work as an entertainer at KPC functions. She is positive about the mine for the business opportunities it has provided and for her family's new-found prosperity.*

*M is 55, Buginese, mother of 9, grandmother of 15 and great-grandmother of 3. She is a primary school graduate. She has lived in Sangatta since 1971 (pre mining era). Her husband came here first looking for land and she followed later. She runs a business in the Sangatta Lama market selling dry food and basic goods. She earns about Rp 500,000 per month. Her husband is a farmer who grows yearly crops especially fruit trees. They own seven houses and rent out six of them making up the greater part of their income. They also own about 15 hectares of land which is used for farming. She does the housework with the help of those children still at home, and makes all the financial decisions in the household. She is thankful and positive about the mining. She is far more prosperous here and says that it is a good place to make money. Some of her young family members work as operators in the mine, though other family members are unemployed.*

Much of the infrastructure in Sangatta and Bengalon; roads, schools and medical facilities, were built by or at least funded by KPC. The best of these facilities are reserved for KPC staff and their families but others living in the area do benefit. The people of Sekerat, for example, are grateful for the road to their village, as they used to be only able to travel by boat. Women in particular now travel more often. Mobility is also increased in Segading, as more people now own motorbikes.

The majority of women interviewed listed some of the negative effects of the mine (environmental and social) but said that they still felt positive about the mining because of their improved economic situation. Most felt very thankful for the role that mining has played in their lives, in providing job and business opportunities for their families and communities, far better educational facilities and opportunities, better health facilities, opening up transport to remote areas and providing general economic well-being. Women are generally positive about development and want it to continue. This



pattern was evident in both locations among both migrants and original residents, and amongst different class and socio-economic groups.

The small minority were those women who had no family members working in the mine, or could see no economic benefit to them from the mining economy. They felt that life was more difficult due to higher living costs. These women were more likely to be poor, with low education levels and live in Bengalon.

### ***Direct Employment in the Mining Company***

The mining has introduced a strong wage economy. A wage means regular payment and certainty that does not exist with a small business or in farming. East Kalimantan does not have the fertility of some other parts of Indonesia making wage work a very attractive option. Employment also brings status. The identity of mine employees is a sensitive issue, particularly whether they are 'local' or non-local.

Employment in the mine is dominated by men, from the top management down to the operator levels. Five percent of KPC employees and four percent of Darma Henwa employees are women and in subcontractors the numbers are even lower. The majority of these women tend to be employed as secretaries or in administrative roles. There are, of course, exceptions to this. There are women who work as mine operators, engineers and in community development, but these are a minority. Women who work for KPC or contractors (as operators or office staff) almost inevitably cease work once they have children. One expatriate told us that he does not like employing young women as operators as after they have been trained they are bound to marry and have children and stop work. Those few women who do work for the mine are usually proud of their achievements and well-known in the community.

*R is a 24 year old Bugis woman. She is a high school graduate. She came with her husband to Bengalon four years ago from Sulawesi and lives in Sepaso Induk. She has worked as a Darma Henwa operator for over a year and earns around Rp 4.5 million per month. Her husband is a high school teacher and earns Rp 1.5 million per month. They own their own house. She is one of only three women operators working for Darma Henwa and all of them work the day shift. She applied for the job because she was bored at home and wanted something to do. She works fifteen days and then has one day holiday. She has no time for any formal social activities. A family member helps with the housework. She is happy with her work and positive about mining. If she has a baby she might continue to work after using the three months maternity leave as there are plenty of family members around to help care for the baby while she works.*

*S is a 26 year old single woman of Torajan ethnicity. A graduate of mining engineering, she is working as a supervisor engineer for one of KPC's main contractors. She earns about Rp 3.5 million per month plus accommodation and food allowance. She lives in the KPC barracks for single employees in Sangatta. Her father works for another major mine in Indonesia, and she grew up there. She has been at KPC for two and half months. She is independent of her parents, and wants to prove her capabilities before perhaps eventually finding work at the same mine as her father. She is positive about mining and her career as a mining engineer. She does not mix with local residents much. She hopes to one day complete a Masters degree in Australia. In the workplace, she says that she is not bothered by being a female among many males. She deliberately chose an unconventional career path with not many women. Sometimes, though, she is frustrated by her male subordinates who are reluctant to take orders from a young woman, and by the tendency for male co-workers to give her innocent comments sexualised meanings.*

Men do dominate employment in the mine and so benefit most directly, however, the general improved economic situation of their wives and families should not be discounted. Most wives of men who have employment in the mine are thankful for their husband's employment. Their husband's

wages usually mean a better standard of living for themselves and their children, and the chance to send children to school to gain a higher standard of education than their parents.

*M is a 27 year old woman and married with two children and pregnant with a third. She lives in Kabo, Swarga Bara. She was born in Toraja and came with her parents to Sangatta in 1993 when her father worked for Petrosea and later for KPC. She is a graduate of the KPC junior high school in Sangatta. She did not want to continue to senior high school and got married directly. Her husband works for KPC and earns between Rp 2 and 3 million per month. She is a housewife and does the domestic work and cares for her children. She has no outside activities. Household decisions are made together with her husband. She is thankful for her husband's wages and says that there are no negative effects from the mine. She hopes that her children will all go to school and achieve more than their parents.*

Age is also an important factor in employment. Particularly for non-skilled positions, younger people are preferred over older people for new positions. It makes economic sense to train a younger person who can work for many years, and the young are more likely to have a higher level of education than their elders. As a result, and especially in Bengalon, older people find it harder to integrate and benefit from the new economy. 'Farmers who are old are still farmers,' said one informant.

*H is a Kutai woman aged about 40 and is a mother of 6 and grandmother of 2. She lives in Sepaso Selatan. She only went to primary school until grade 2 as her farmer parents could not afford the cost. She was born in the interior of East Kalimantan and went in search of work in Malaysia when she was still single. Eventually she came to Bengalon in 1988 hoping to find work in the plywood industry. She married here and stayed. She works as a housewife and runs a small shop out of her house. She also helps cook for caterers, helps her husband in the field and makes fishing nets in her spare time which she sells for Rp 200,000 each, but each net takes a long time to make. Her husband has never applied to the mining company for work because one has to be young and have experience to do so. Her daughters look after most of the housework, but she decides what must be done. Prices of goods have become very expensive in Bengalon. Her life is the same since mining began. She has never received any help from KPC or the local government. Her daughters have applied for work at the company but have been unsuccessful, and given up, as a lot of money is needed for the application. She said it would be good if they could work there as they would have constant wages.*

We came across quite a few women, mostly young, who expressed a desire to work for the mine, and were disappointed in their inability to obtain employment.

*S is a 26 year old Kutai woman. She lives in Sekurau Atas and has two children. She is a primary school graduate and she and her husband grow vegetables and work together to get water and firewood. She makes decisions about household money. Life has become more difficult in the village since mining began as all the deer have moved away. She is not happy about the mine, because she cannot work there without any education. She would like to work for the mining company, or if not her then maybe her husband. She would like to own her own home.*

*A is a single 23 year old Buginese woman. She was born in Sangatta and is a high school graduate. She works in her mother's shop and helps with household tasks. Her father is a KPC operator. She once applied to KPC for employment as an operator but was unsuccessful. She failed to pass the test, but suspects that her failure had more to do with 'insiders who give work to their relatives and friends'. She said that Dayak and Kutai people who have only passed primary school are given work whereas she is a high school graduate. Competition for employment is not healthy, she said, people must pay a bribe first. She is somewhat insulted by this, although she is thankful for her father's employment. Amongst her female classmates, many married as soon as they completed high school and only a few are working.*

As well as direct employment with the mining company and the general better opportunities for business created by the mine, we also observed a number of people, particularly young people working in indirect or periphery employment positions. These positions are not as well paid and quite gender segregated. Young women may work as maids in KPC housing complexes or shop assistants or in small catering businesses, while some young men work as caddies for golfers in Tanjung Bara.

### ***Changes to Household Patterns of Work***

As married men take up waged positions in the mines, the general pattern observed in Sangatta and Bengalon is that wives of mineworkers almost automatically become housewives. When asked their occupation, many women answered, 'I don't do anything, I'm just a housewife,' indicating that household work is considered to be of low status and unproductive.

The mine itself reinforces this gendered family ideal. It invites worker's wives in to look at the mine and see the risks in order to convince them of the importance of their roles as wives and the necessity of looking after their husbands and making sure he gets enough rest. Housing in the company complexes is designed to accommodate the modern 'nuclear' family.

For many, particularly those in the lower or 'operator' class, mine work is a dramatic change from their earlier roles as subsistence farmers where men and women would work together in the fields. While tasks in the fields were often divided by gender, men and women were still quite equally responsible for production. This is true of both those groups in Bengalon who previously were local subsistence farmers, and also those migrants such as the Torajans living in Singa Gembara.

Some women enjoy their new role as housewives and their freedom from hard work in the fields and reliance on crops.

*S is a Dayak Basaf woman in her 20s. She lives in Sekurau Atas and has had four children but one has died. She has never been to school and cannot read. She came to Sekurau Atas 10 years ago looking for food. She was an orphan. She used to work in the fields but now her husband works for Darma Henwa. She isn't sure how much he earns as she can't read, maybe about Rp 3 million per month. They have about two hectares of inherited land but this is no longer worked. Her house is bigger and in better condition than many others in the immediate neighbourhood. She is happy about the changes brought by the mine, because she used to have to work hard in the fields and now she can stay home and just do the housework and mind the children. Sometimes she can't think of anything to do and just has a sleep in the afternoons. She hopes her children will go to school until they graduate.*

Some women are able to run small businesses that they can fit in alongside their domestic role, though even then rarely are they able to earn as much money as their husbands can in the mine.

Dependence on a husband's wages can have particularly negative effects should the husband lose his job, divorce, take a second wife, squander his wages or treat his wife badly. A wife's bargaining power in such situations may be low. While dependence such as this no doubt occurs in many other parts of Indonesia, as one Javanese woman noted, it occurs far more often in the mining area.

*N is a 38 year old Buginese woman, married with 2 children. She is a high school graduate. She has lived in Kabo, Swarga Bara for 9 years. She followed her husband who had work here. Her husband used to work for Petrosea, a former KPC contractor, but is now out of work. She is a housewife and does all the household work and child minding. She says her future depends on the ability of her husband to find new work. She is positive about the mining, and cannot think of anything that is negative about it.*

*Y is a 30 year old Javanese woman. She is primary school graduate and lives in Kabo, Swarga Bara. She once worked as a housemaid, but is now a housewife. She has one child. She has lived in Sangatta since she was about 10 years old. She came with her parents who worked for Porodisa. Since the company folded, her parents have become farmers in the Rantau Pulung transmigration area. She married here. Her husband worked for KPC for 20 years, but was fired for not reporting a minor accident. When her husband was working they had regular income but now have no income. Her husband is looking for work in Bengalon. She is generally happy about the mine, but her husband feels that he was not treated justly by KPC. Her child attends the KPC junior high school. When her husband was fired, their child was told to leave the school. They asked for a review of the decision, and in the end their child was allowed to stay at the school. She said 'only KPC employees get their needs fulfilled, others can only watch.' She said that her future depends on the ability of her husband to obtain work. She hopes her husband will find work again, and that they will be able to afford their child's continued education.*

In contrast, a woman with her own skills is more capable of coping should her husband become unemployed.

*K is 43, Buginese, has 3 children. She lives in Singa Gembara. She is a junior high school graduate. She is a tailor and supports her family with her income. Her husband used to work for Petrosea but is now unemployed. Her husband insists that he is only temporarily unemployed but she is not relying on his finding work soon. She has lived here in Singa Gembara for four years. She and her husband moved here in the hope of improving their lives. She is happy with the decision because here her children can go to school, whereas back in Sulawesi it was much more difficult to afford it. As well as earning a living, she also performs all the housework and minds the children, and is a member of two women's groups. She is positive about the mine's effects.*

Higher class married women, particularly in the Sangatta housing complexes where most managerial staff are based, also take on housewife roles more often than not. Different to lower class housewives they may do less housework, employ a maid or two and do not have to worry as much about water or electricity. They have more options available to them due to their usually higher levels of education, but often find it difficult to find work in the mine dominated area. According to one informant, in the earlier days of the mine educated wives found work in mine offices quite easily, but that has changed now. General expectations are that women will provide a good home for husband and children, and spend much of her time educating and seeing to children's needs, and any work that they do should fit around these primary tasks.

*Y is a 36 year old Buginese woman. She lives in a KPC housing complex. Her husband works for KPC in a managerial position. She came to live in Sangatta in 1997 when her husband got work here. She is a university graduate. She worked briefly for KPC, but quit when she became pregnant. She is a housewife but employs a maid. She uses her hobby of cooking cakes to run a successful home business to make extra money, but the needs of her son always come first in priority. She is dominant in the household in financial matters and holds her husband's wages. She values her role as a housewife as she has control over her time, and may choose what she does and when – unlike in an office. She is very busy, and is a leader of Periska, the KPC wives' association. She complains that the mine makes the weather hot, but is overall happy about it.*

Single people taking up waged employment have also had effects on household composition. In Segading, for example, the young men with mine employment have left their village to live below in Sepaso and only return when they are on leave and may only contribute their labour on village farms during those times.



## **Loss of Agricultural Land**

The loss of agricultural land in mining areas affects only original (pre-mining) inhabitants, and is usually a non-issue for migrants.

According to those we spoke to, in the Sangatta area, the mine did not take up much agricultural land, the main mine areas are said to have been unpopulated. Small numbers of people were practicing shifting cultivation along the Sangatta River in the pre-mining era. The mine certainly must have displaced some of these farmers, and it is said that they were compensated. It occurred quite some time ago now and no-one we spoke to knew exactly where these particular farmers had moved to. The two women living in Singa Geweh whose families are native to the area said that they were happy with the mine. They said Sangatta used to be quiet and isolated but now the area is developed. Now some women are farmers, some are mine operators and most are normal housewives. Some had their land taken but it was compensated for. Compensation money was used for small businesses and household expenses, but only the smart ones used it for trading. We are happy and the majority of local people are happy.

In Bengalon, the mine has indeed taken over some agricultural land, and is continuing to do so. However, we found few people who seemed overly upset about it. In fact, a lot of land, particularly rice fields, still owned by the villagers is lying fallow as men take up waged positions in the mine. The 'freeing up' of land and related compensation procedures are ongoing in the area, and many people say that they look forward to having their land taken by the mine, and gaining compensation for it. Loss of land and decreasing production of remaining land does mean that women who once worked as farmers, now must rely on their husband's wages for income and buy all their food. This also means decreased access to the subsistence resources offered by that land and increased dependence on the market for daily needs. Without definite incomes, especially from the formal sector, women generally are ill-placed to cope with the higher market prices. A *kepala adat* (customary village leader) noted that mining is destructive of the local environment and of resource-based livelihoods.

This effect is not uniform across areas. In Sepaso, most people seemed pleased to have managed to get compensation for their land. In Sekerat two older women complained about the effects of loss of their agricultural land.

*Y is a 46 year old Kutai woman living in Sekerat. She never went to school. She is married and has 6 children and 3 grandchildren. She used to be a farmer but now all her land has been taken by KPC. The compensation money has been used up. Her husband is a fisherman but only for their own consumption. They still own one hectare of rice paddy. Her children work and help support her financially. Financial decisions are made together with other family members. Her husband is too old to try to get work in the mine. She is positive about the new road to the village but negative about the loss of land. She is also annoyed by dust when the wind is the right direction.*

*M is in her 40s. She was born in the Sekerat and lived there all her life. She went to school until second grade of primary school. She is a housewife. Her husband works as head of the neighbourhood association and also selling swallows' nests. He earns about Rp 800,000 per month. They have four children and 1 grandchild. Another grandchild died. Almost all of their land has been taken by the mining company, they only have one hectare left which they don't use. Life has become harder now that they have no land. They have to buy all their needs and going into town is expensive.*

In the Dayak areas of Sekurau Atas and Segading, many people said that the mine had caused all the deer to move much further away. Deer sell for substantial amounts of money. Deer hunting is the traditional work of young Dayak men and while some have abandoned it anyway for work in the mines, others still lament the loss of the deer. In addition to mining, logging, both legal and illegal, has stripped away many forest products that the Dayak once relied on.

## **Compensation**

The issue of compensation is of course closely tied to that of loss of agricultural land. Ideally, compensation would be sufficient for and effectively used for securing an alternative and sustainable livelihood to replace the earlier dependence on the agricultural land. It should be sustainable enough that the young generation also benefits.

In both Sangatta and Bengalon, many informants thought that the majority of compensation money had been quickly used and often wasted, and that only very clever people had managed to use it for building long-term prosperity. Particularly in areas where people are unused to handling large amounts of money, the compensation has quickly dissipated. KPC says that it brings along a representative of the Bank Rakyat Indonesia when compensation monies are handed over, but admits that very few recipients place the money in the bank.

Some astute people are using compensation money for longer term benefit, and along the main road in Bengalon houses and shops have been built with compensation money. A couple of informants in Bengalon mentioned looking forward to the time when they receive compensation for their land and hope that it happens sooner rather than later.

*S is 45 years old and has 10 children. She was born in Bengalon and only completed one year of primary school. She is a housewife and her husband is the head of the village council and receives a small wage. They own their own home. Some of their children work, including one who works for Darma Henwa. They own about 50 hectares of land and are waiting for KPC to take the land and compensate them for it. They are hoping that the money will be used to start a business or to go on pilgrimage to Mecca. They are more prosperous, as the economy grows, and the future will be good once they get the compensation money.*

Some enterprising people have also been buying up, or settling, land that they predict will one day be needed by the mine and hope to be compensated for it in the future.

Men have been the direct beneficiaries of most compensation money, and where it has been wasted it is men who have done the wasting. In most of the households of informants, it is the wife who manages day-to-day household financial affairs. It seems, however, that matters of compensation have been seen as men's priority. In Segading, for example, compensation was used up on buying motorbikes and 'buying wives' - a euphemism for visiting prostitutes. It is reasonable to assume in such cases that the benefits of compensation are not being felt by women and are not trickling down to the next generation.

In 2004, several women complained to Kuntala that KPC does not tend to involve women in the process of land compensation, and wives often do not know the exact amount that has been paid. Kuntala subsequently made suggestions to the Company that it should make sure that women are present during compensation transactions. It appears, however, that little has changed and a KPC employee remarked that men have been refusing to allow it, and KPC has been unable to insist.

## **Behaviour Changes in Men**

As noted above, a wife's dependence on a husband's income becomes particularly critical when a husband's behaviour disrupts the family life. Previous studies of mining have noted increases in prostitution and alcoholism. Moral issues aside, these activities have the potential to be harmful to the women who depend on them. Domestic violence may also be one outcome of dependency.

Prostitution is certainly an issue in both locations for this study. There are large prostitution complexes in Sangatta and Bengalon, as well as some smaller bars that are also staffed by sex workers. A KPC commissioned report estimates that 22% of prostitute's clients in the area come from KPC. In Bengalon the owner of a brothel told us that although some clients are indeed mineworkers,

the majority of clients are actually illegal loggers. Unlike the Freeport mine in Papua, where buses openly transport mineworkers to town to visit sex workers, prostitution in the KPC areas is far less blatant. Apparently prostitution was particularly prevalent during the exploration and construction stages of the mines when few men brought their wives with them, but has decreased somewhat since then.

Many women informants, in both Sangatta and Bengalon, agreed that prostitution is a problem for the wives of miners. They said that the culture of the mine encourages men to visit prostitutes, and they fear that they will lose their husbands (and his wages) to them. In Singa Geweh and Kabo women commented on the large numbers of men known to cheat on their wives, and the negative emotional and financial effects this has on wives. In the Sekerat area, a group of women had just successfully closed down a bar and forced the prostitutes working there to move out, because they feared losing their husbands to the prostitutes. One man they knew of had left his wife and married one of the prostitutes. In Sepaso it was lamented that women did not have the power to do the same thing as the women of Sekerat.

With prostitution comes the risk of sexually transmitted infections such as HIV/AIDS and transmission from husbands who have had sex with prostitutes to their wives. HIV/AIDS is certainly a growing problem in Indonesia, and there are some cases of it occurring in East Kutai, including an anonymous HIV positive test from a working prostitute. Prevalence of the disease is still low in East Kutai, and is far higher in areas such as Jakarta and Papua. KPC is currently running a campaign to raise awareness of HIV and how to prevent infection.

There is also the factor of the impacts on the prostitutes themselves. The market for sex in mining areas due to the large numbers of employed men prompts pimps to ship young women in from elsewhere, mainly from Java. These women have stories of husbands who left them with nothing, or running away from home to avoid an unwanted marriage, or using sex as a means of survival in the big cities of Java. In Kalimantan they enter into a cycle of often unending debt for the cost of their passage, and later for their accommodation and food in the brothel. More desirable women are able to charge high rates, but others are often unable to attract customers and just accumulate a larger debt. The women take up smoking and other unhealthy habits and are prey to sexually transmitted infections, pregnancy and the social stigma of being a sex worker. Although they did not mention it themselves, two of the women interviewed in Sepaso Barat were known to be former sex workers indicating that social stigma of having worked as a prostitute is hard to lose.

We have very little evidence on the issue of domestic violence in Sangatta and Bengalon. Only one woman in Bengalon told of a case she knew of where a man who had never hit his wife during seven years of marriage suddenly began doing so after beginning work in the mine. In Singa Gembara we were told that although the majority of women are dependent on their husbands, domestic violence against women rarely happens because of strong ethnic community ties. The little evidence on the issue of domestic violence may be for two reasons, one that it indeed rarely occurs, or two, that no-one speaks about it if it does. More commonly spoken about is men who desert their wife and/or take more than one wife/partner. There are no formal avenues for help such as legal aid or women's crisis centre in these areas.

Alcoholism amongst husbands also does not appear to be a significant issue, or again may be rarely spoken about. Some bars have sprung up around the mining camp sites, particularly within reach of expatriates, and this culture has spread to some other mine workers. Only in Singa Geweh did we hear a woman say that sometimes a husband will come home drunk. However, some did feel that young single men with newly acquired wages were being unduly affected by outside culture and were consuming alcohol.

## ***Environmental Impacts***

Large-scale mines are notorious for their environmental effects. KPC itself has quite a good reputation for its environmental management program, it being an ISO certificate holder, and spends large amounts of money on land reclamation projects.

There were two main complaints that women made about the environmental effects of the mine. The first complaint was **dust** caused by the blasting operations in the pits. Women said that many children suffer from respiratory infections and asthma. Some women also commented that autism in children born in the area is also a problem, though agreed that the medical link between the mine and autism has not been proven. Women also have a higher burden of housework, as the interior of houses quickly build up black grime from the dust.

**Photo 4: A view from Sangatta Mine**



**Water** availability and changes in quality comprise the second important environmental factor affecting women. The water in rivers in Bengalon are not as clear as it used to be, although this is likely to be as much a result of mining as deforestation and illegal logging further upstream and the increased population and therefore increased numbers of people using the water for washing and as a sewerage outlet. The Sangatta River is reportedly affected by KPC mining, and no longer supports the fish stocks that it once did. The Rivers are the source of water for many households, and must be treated before use.

The Sangatta area has always been short of clean water. It only supported a small population before mining began. The increased population has created a greater demand for water, which the mining company and the government have introduced various measures to overcome. Outside KPC housing complexes, access to water in these areas is either a ‘take what you can get’ system, obtaining it from wells or the rivers, buying it for those who can afford it, or relying on Company community



development provision of water. Rights to water sources are also not clearly stated in the law, and men and women are not eligible for compensation for any lost access to conventional water sources.

**Photo 5: Woman washing clothes**



In Singa Gembara, there have been recent complaints that the water coming out of Pit J has killed off the fish in some fresh water fish farms due to low pH. KPC was investigating the causes while fieldwork was underway. Only in Singa Gembara did we find water to be the particular burden of women. Many husbands work in the mines, and the job of queuing for the water that is delivered by the Company has fallen to the women. Women queue for many hours in the morning and afternoon and do not always receive water for their efforts. In other areas, such as Kabo and Singa Geweh, women said that the job of organising clean water for the household was shared between men and women according to their particular family circumstances.

Bengalon too is reliant on river water. The river water must be treated before it is suitable for washing clothes and bathing. Safe drinking water is always bought bottled, as is the case in most other parts of Indonesia. KPC provides some water to those residents without their own source, but many people still complain that it is not enough.

Flooding is said to occur more often in Bengalon since mining began. Deforestation through mining, but mainly because of logging, is probably at fault.

**Photo 6: The Bengalon River in Sepaso**



Similarly, the traditional sewerage systems have broken down and new sewer pipes have not been put in place. This directly impacts upon women's health and privacy. Poor quality of water supply and lack of sanitation cause immense difficulties for women in both locations. These difficulties are not only in terms of poor health of women, but affect the next generation through them.

### ***Women's Decision-making and Political Voice***

Although women often have decision-making power at household level, particularly over everyday finances, this has not translated into decision-making power and political voice at the community level in the research locations.

There are very few female community leaders in either research location. The one female member of the East Kutai regional Parliament is reputedly just a puppet for her husband who could not get elected himself. Those few, such as the former female village head of Sepaso, are unusual and must have quite extraordinary levels of determination to succeed.

*Ibu Daya is a 43 year old Kutai woman. She is a widowed mother of four children (aged between 5 and 15). She was born in Bengalon. She has a Masters degree and is the former village head of Sepaso (1996-2004). Her father was also village head from 1959 to 1996. Her family tried to make her marry once finishing primary school, but she wanted to keep going to school and ran off to Samarinda to go to high school. She could not afford it, but was determined and found a way. She now runs an insurance business and earns about Rp 10 million per month. She also has land used for fish farming. She ran as a candidate for the 2004 East Kutai regional election but was not elected. She is more prosperous since mining began in the area, but has closer economic ties with PIK than KPC. She has a maid to do the housework as she is busy working. She hopes that in Bengalon, local people will develop alongside incomers, and not follow the pattern of Sangatta. She obtained her Masters degree mainly just to prove that it could be done, and hopes that local people's motivation for obtaining education will increase.*

Male dominance in the mining company and its masculine culture that affects how it interacts with the community is no doubt a contributing factor to low female representation. It is, however, hard to link this pattern solely to the presence of the mine. Traditional gender roles that place men as leaders are still prevalent. Also, according to the political and administrative culture of Indonesia established during the Suharto New Order period, women tend to gain leadership positions through their husbands, and then they are expected only to lead other women in social and charitable activities. Where the wife of a male leader is not suited to leadership herself then the women's groups she is supposed to lead often become inactive. This pattern is clearly seen in these areas in PKK and even the women's NGO, LP3KT, in Sangatta.

The company does tend to make assumptions about the community people it deals with. It deals most with those it sees as trouble makers, and these tend to be outspoken men. We observed that meetings between mine and community regarding land and other issues of importance rarely include women.

Women's capacity for community action in these areas is not completely curtailed, as the example of the women of Sekerat who worked collectively to close down the bar and brothel operating in their area shows. Women have been participants in demonstrations against the mine, and said that they made up their own minds about whether they should participate.

In Singa Geweh women informants said that most women are housewives and have not been to school. Some take part in PKK and *arisan*, but no-one has anything to do with politics. No one thinks about being political. The idea of running for village head is laughable. 'We don't take part in demonstrations, what would be the point? We would just get tired and bothered for no outcome. We are neutral. We usually just keep quiet, we have to think of the cost of transport and fuel and who will mind our children.' One woman in Singa Gembara commented 'I didn't go to the demonstrations Pit J, to do so would be to demonstrate against my own husband who works there.'

One woman in Sepaso Induk commented that she would like to promote women's interests but does not have friends willing to act. The village head of Sepaso Induk also said that when he invites women to meetings only a few come along. 'Women are shy of putting themselves forward,' said the head of the Sepaso Selatan village council.

### **Youth, Education and Employment**

The young people of Sangatta and Bengalon are most differentiated by class, based on their parents' incomes, and by age depending on whether they are junior or senior high school aged.

In Sangatta, the children of mine managers and other well-paid staff tend to attend the KPC junior high school which is thought to have quite good standards. However, senior high school students of wealthy parents are usually sent elsewhere to good schools in Samarinda, Java or even overseas. The



KPC housing complexes are mostly empty of young people over the age of 16 (excepting housemaids and the like).

The children of less wealthy parents have the option of attending the Sangatta Senior High School, which although originally funded by KPC is actually a government school and therefore has low fees. There is selective entrance to this school, and those who do not pass the entrance test must seek entrance to a private school and pay the necessary school fees there.

The school that a person attends of course has an impact on young people's future prospects. A parent's ability to pay for university education is a further obvious factor, one that the students interviewed at the Sangatta Senior High School were all well aware of. The students interviewed were all keen to attend university and none thought that they would look for work directly after graduating, although they did think that some of their classmates might do so.

*F is a 19 year old Kutai woman. She was born in Sangatta and her family is native to the area. She lives in Singa Geweh and is still studying at senior high school. Her older sister works as an operator for KPC, and when she finishes school she also intends to apply to the mine as an operator. She says that a monetary payment is often needed in order to get work in the mine. Her sister was able to get work because of her status as a local and because of her membership of a foundation (yayasan). Maybe only some get employment in the mine without paying she said. She feels positively about the mine, and says she can see no negative influences from it on her life.*

In Bengalon there is not such a class difference amongst students as there is not that upper class of managers and their families living there. Since mining began in the area, and schools have been built, educational opportunities for all have greatly increased, but most particularly for girls. Once it was thought that girls would become farmers and therefore needed little education, but now the benefits of education in the wage economy are clear. However, ethnicity does play a role. Local Bengalon students tend to achieve lower results than the children of new migrants. Dayak Basaf girls in particular are still likely to drop out of junior high school in order to marry young.

We came across three high school aged girls in Bengalon who had dropped out of school. In Sekurau Bawah the 17 year old daughter of palm sugar farmers had stopped school after finishing primary school. She cannot continue. She wants to work but her father won't allow it and she doesn't want to get married yet, so she stays home and helps her mother in the house. A girl in Sepaso Barat had also dropped out of junior high school because she was embarrassed that she did pass a grade. She stays at home and helps her mother around the house now. Her brother is still at school and doing well on a KPC scholarship. The third was the 17 year old daughter of Buginese migrants living in Sekurau Bawah. She passed junior high school at an Islamic boarding school in Sulawesi, but could not continue due to lack of money. She now works cooking and packing prawn crackers and making cakes to sell to PBU. She is happy about living in a mining area, and wishes she could work for the company. She would also like to go back to school, but there is no money so she must help her parents and five siblings.

Teenage delinquency in Sangatta was the subject of a University of Indonesia report commissioned by KPC in 1997.<sup>6</sup> The report found that drunkenness was the worst form of delinquency amongst teenagers in Sangatta with occasional mass fights and drug abuse also occurring. It also concluded that outside influences, dropping out of school and broken homes were the main causes of such behaviour. The report recommended that sport, educational skills, arts and recreation facilities be built to keep teenagers active and learning valuable skills. According to a former KPC employee the report was never really acted on. There is still minimal entertainment in Sangatta for teenagers, including the internet café, watching movies and television at home and hanging out in the Town Hall area. There is

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<sup>6</sup> *Masalah-masalah Remaja Di Sangatta, Kalimantan Timur*, Disusun oleh Tim Laboratorium Ilmu Politik, Fakultas Ilmu Sosial dan Ilmu Politik, Universitas Indonesia, Jakarta, 1997.



even less entertainment in Bengalon than Sangatta. They can go to the night market which is held twice a week and sometimes there are bands that play.

In present day Sangatta we received conflicting responses from informants regarding teenage delinquency. Some said there was no problem at all, while others listed alcohol, motorbike racing and drugs as occurring among teenage boys in Sangatta. The students interviewed at the senior secondary school claimed not to be involved and the worst they do is smoke cigarettes (boys only). One mother of teenaged boys at the senior high school told me that she fears for them when there are drug raids at the school should someone put drugs in her children's bags in order to hide them. The women in the FGD in Singa Geweh blamed unemployment for youth problems. They said that many teens are unemployed, especially migrants. Now that KPC employs so many locals, there is less unemployment and less problems amongst the local young people. Those who do not have work are the problem.



18. Kalau Anda adalah pendatang ke daerah ini, mengapa Anda memilih pindah ke daerah ini?  
- menurut Anda, apakah keputusan pindah tersebut sudah benar?
19. Di mana Anda tinggal sebelum pindah ke daerah ini?

## **Bagaian 2: Ekonomi Rumah Tangga Sebelum dan Sesudah Pertambangan**

1. Siapa saja yang melakukan kegiatan berikut di rumah tangga Anda?
  - a) Mencari uang/bekerja
  - b) Belanja (untuk keperluan sehari-hari)
  - c) Pekerjaan rumah tangga
  - d) Mengasuh anak
  - e) Mengambil air
  - f) Bertani/berkebun
  - g) Lainnya (tolong sebutkan):
2. Kegiatan apa saja yang biasanya Anda lakukan di tengah masyarakat (selain bekerja)?
  - a) anggota organisasi (tolong sebutkan nama organisasi):
  - b) pejabat/petugas (tolong sebutkan):
  - c) gotong-royong
  - d) aktif di bidang politik
  - e) aktif di bidang agama
  - f) tidak ada
  - g) lainnya (tolong sebutkan):
3. Siapa saja yang biasanya mengambil keputusan di rumah tangga Anda?
  - a) tentang soal-soal keuangan
  - b) tentang pembagian pekerjaan rumah tangga
  - c) tentang hal-hal lain
4. Menurut Anda, apakah harga bahan-bahan pokok (misalnya beras, minyak tanah, minyak goreng, sabun dll) sekarang ini...
  - a) terlalu mahal/mahal sekali
  - b) mahal
  - c) harga pas
  - d) murah
  - e) tidak tahu
5. Apakah keadaan keuangan di rumah tangga Anda berubah sejak Anda pindah ke sini/atau sejak pertambangan mulai di sini?
  - a) ya, menjadi lebih sulit
  - b) ya, menjadi lebih makmur
  - c) tidak berubah, sama saja
  - d) tidak tahu
6. Bagaimana keadaan di daerah ini sebelum pertambangan mulai? (kalau Anda adalah pendatang yang pindah ke sini sesudah pertambangan mulai, bagaimana keadaannya ketika Anda pertama kali datang?)
7. Bagaimana keadaan pada umumnya di daerah ini sekarang?

8. Menurut perkiraan Anda, apakah keadaan keuangan rumah tangga Anda akan berubah dalam dua atau tiga tahun ke depan?
- a) ya, akan menjadi lebih sulit (pendapatan akan berkurang)
  - b) ya, akan menjadi lebih mudah (pendapatan akan bertambah banyak)
  - c) tidak akan berubah, kira-kira sama saja
9. Menurut Anda, siapa saja yang akan paling membantu daerah ini selama dua atau tiga tahun ke depan?
- a) pemerintah daerah
  - b) perusahaan pertambangan
  - c) wirausaha setempat
  - d) Lembaga Sosial Masyarakat (LSM)
  - e) lainnya (tolong sebutkan):
10. Bagaimana perasaan Anda pada umumnya terhadap pertambangan batu bara di daerah ini? (dan apa alasan Anda?)
- a) positif sekali
  - b) positif
  - c) netral
  - d) negatif
  - e) negatif sekali
11. Apa keinginan Anda untuk masa depan keluarga Anda dan daerah ini?

**Topik-topik untuk diskusi tambahan:**

- \* Kesehatan
- \* Pengalaman kaum perempuan di daerah pertambangan
- \* Pengalaman pemuda-pemudi di daerah pertambangan
- \* Kenakalan remaja
- \* Perbedaan kehidupan antara penduduk asli dan pendatang di daerah ini
- \* Saran-saran tentang bagaimana meningkatkan pengaruh positif dan memperbaiki pengaruh negatif dari pertambangan pada kaum perempuan dan pemuda-pemudi
- \* kekuasaan di atas sumber daya alam/tanah dll.