



Impact of the Tsunami and Earthquake of 26 December 2004 on Apindo's Enterprises in ACEH Province

ILO-APINDO Rapid Assessment
Banda Aceh, 23 March 2005



Preface

The earthquake on 26 December 2004 and the tsunami that followed plunged the Province of Nanggroe Aceh Darussalam (NAD) into a humanitarian crisis. Most of the damage occurred in 14 coastal districts of the province. The massive destruction resulted in more than 600,000 women and men losing their source of livelihood and employment, and damaged both public and private sector infrastructure.

One of the objectives of the ILO's work in contributing to the reconstruction and rehabilitation efforts is to assist with re-establishing jobs, employment and other livelihood activities. Clearly, supporting employers to restart and rebuild their businesses is a strategic way to help the economic recovery of the province and to provide employment opportunities.

In collaboration with the Indonesian Employers' Association (Apindo), the ILO conducted an assessment of the impact of the earthquake and tsunami on the enterprises of Apindo members in the 14 worst affected districts of Aceh. The study set out to describe the condition of these enterprises prior to and after the disaster, in terms of human resources, infrastructure and economic activity. The assessment aims to enable a better understanding and quantification of the damage sustained by the enterprises concerned and the development of practical strategies to assist their recovery.

Although the study provides only a preliminary estimation of the state of these enterprises earlier this year, the results give a general indication of the serious impact of the disaster on enterprises in the province. According to the assessment the disaster has damaged productivity by an estimated 68%. It also points to the difficulties in restarting any significant activity in enterprises in which on average 40% of the staff and 60% of the office and workshop equipment have been lost.

We hope this publication will contribute to efforts to mitigate the impact of the tsunami on enterprises in tsunami-affected districts and, in so doing, to assist with the economic recovery and rehabilitation process in Aceh.

Jakarta, October 2005

Alan Boulton

Director ILO Jakarta



Preface

The Earthquake that measured 8.9 on the Richter scale and the subsequent Tsunami on 26th December 2004 destroyed many areas of Nanggroe Aceh Darussalam Province (NAD). The earthquake, which was the worst in the history of Aceh claimed many victims and caused severe damage to property. It is estimated that 600,000 people died and property worth billions of rupiah were destroyed. In this grave situation the Acehnese seemed to lose hope in the future. Most of Apindo's members vanished in the disaster and for those who survived most if not everything was lost. In this situation little attention and assistance from the government and international donors were given to Apindo members.

In this situation, the International Labour Organization (ILO) came to us to offer support and technical assistance. When the support was offered to us we accepted it happily and our hope was restored. The assistance that was set up by ILO is now a reality with the assessment of Apindo members in NAD Province affected by the tsunami. The result of that assessment is published as the report - now in your hand.

This report is expected to share important information about the real condition of Apindo after the tsunami destroyed NAD Province and Nias, North Sumatra. This report is also expected to be used as a valid and updated reference for other institutions. Furthermore, for those who want to study about Apindo in the future, this report can be used as a preliminary hypothesis to elaborate the next research. In addition, Apindo is also open to any other institution for good cooperation to empower the Acehnese society generally and Apindo members especially.

We realize that this report is methodologically weak. Hopefully the findings can reflect the real condition of Apindo and we welcome inputs and discussion about the report. Finally, we are very thankful to ILO staffs who have given their attention, time and energy to produce this report.

Banda Aceh, October 2005

H. M. Dahlan Sulaiman, S.E.
Head of Apindo NAD Province



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Background and Justification

The province of Nanggroe Aceh Darussalam (NAD) was seriously affected by the earthquake and tsunami of 26 December 2004, which swamped the northern and western coastal areas of Sumatra and outlying islands. Most of the casualties and damage occurred within 14 coastal districts of Aceh province.

ILO's role in the recovery and reconstruction operations focuses on the volume, quality and sustainability of livelihood recovery. ILO intends to concentrate its efforts on supporting enterprises and enhancing social participation in both labour issues and development.

ILO estimates that 600,000 jobs have been lost in Aceh. Many of these jobs were provided by small enterprises. Unfortunately, the magnitude of the crisis in many cases does not allow us to properly quantify the impact of the economic activities, and without proper assessment of the status of the enterprises it is hard to address the real needs and support economic rehabilitation.

In this context ILO is supporting its constituents in coping with the impact of the crisis. The employers' organisations have a big role to play in the aftermath of any crisis because they have the closest relations with the entrepreneurs. Particularly in the Acehnese context, APINDO can clearly increase the effectiveness of the overall livelihood recovery effort.

This survey, with its limitations, is the first assessment conducted on private enterprises in Aceh and, even with some unavoidable degree of estimation, the information gathered gives the clearest picture yet of the impact of the crisis. Therefore both ILO and APINDO are pleased to make the report available to any organisation interested in the field of economic recovery.

Assessment Objective and Methodology

ILO and APINDO conducted this survey to assess the impact of the earthquake and tsunami on 26 December 2004 on the enterprises registered with APINDO throughout the province of Aceh. The assessment aims to enable a better understanding and quantification of the damage sustained by the member enterprises.

The assessment sample consists of 316 enterprises registered with APINDO. A questionnaire was developed to assess the enterprises on an individual basis (form attached in Annex 1). Due to the urgency of gathering initial data, the questionnaire was drafted as simply as possible, using as a starting point both the IFP/CRISIS “Crisis Response Rapid Needs Assessment Manual” and the “Local Economic Development in Crisis Response” operational manual. The survey is focused on identifying key indicators for quantifying the crisis’ impact on the enterprises by comparing the information from before and after the earthquake and tsunami.

The questionnaires were submitted by APINDO itself by deploying eight people throughout Aceh for a period of two weeks. The data gathered were registered in Banda Aceh in a previously prepared electronic database. The database is intended to provide a general overview of the 316 APINDO enterprises in Aceh as well as more disaggregated information at the district level. This is because the impact of the crisis has not been homogeneous and the report would have been less accurate if the data were only processed for the province of Aceh as a whole.

Both the questionnaires and the database will remain with APINDO as a contribution to the enhancement of information about its members.

Apindo Overview

APINDO is a democratic, free and independent employer's organisation in Indonesia which has a specific interest in dealing with employment matters/industrial relations. The organization was established in Jakarta under the name "*Badan Permusyawaratan Sosial Ekonomi Pengusaha Seluruh Indonesia*" (PUSPI) on 31 January 1952.

At the 1st PUSPI National Congress in Surabaya in 1985, the name "PUSPI" was changed to "*Asosiasi Pengusaha Indonesia*" (APINDO).

The Provincial Board of APINDO NAD was established in 1988 in response to the rapid technological development and increasing trade liberalism which was having a significant impact on business worldwide. On the other hand, matters of the economy were managed neither efficiently nor effectively.

Multi dimensional crisis in 1997-1998 has affected the national economy. The combination of high rates of corruption, collusion and nepotism on the part of inefficient bureaucrats, inconsistent regulations, low productivity and increasing demands from the workers resulted in a high cost economy, which ultimately encouraged capital shift on a massive scale. This condition has exacerbated unemployment and poverty.

Under these circumstances, there were various endeavours to lessen the pressure on the national economy by developing healthy, secure and harmonious relations between employers and employees. APINDO provides a channel through which the business community can develop harmonious, dynamic and sustainable industrial relations.

Before the tsunami, the provincial Board of APINDO in NAD had taken action in the following fields:

A. Defence:

1. Assisting in the formulation and extension of company regulations and labour agreements.

2. Assisting in the settlement of industrial relations disputes.
3. Assisting in discussions with trade unions and government.

B. Protection:

1. APINDO participated in discussions on the formulation of employment regulations at province and district levels.
2. APINDO has been involved in discussions on the minimum wage for the province and districts of NAD.
3. Having made an early detection of companies in districts that are vulnerable to worker unrest, APINDO has empowered workers through bipartite and tripartite institutions.

The earthquake and subsequent tsunami struck on 26 December 2004, and caused an outpouring of grief and sympathy not only in Aceh but all over the world. Business in the province was paralyzed.

In the midst of this confusion, with business at a standstill, ILO assisted APINDO NAD to collect data on its members in the aftermath of the earthquake and tsunami and survey the impact of the disaster on the enterprises concerned. These data, from 11 districts in the province, are presented in this report.

To re-empower the business community, APINDO propose the following actions:

1. ILO and APINDO must follow the findings of the survey by immediately providing funds to the employers.
2. Beside giving financial assistance to the employers, ILO and APINDO also must conduct skills development training for workers.
3. Data should be collected on drop-out youths and/or youths who are entering the work force so that they can be given skills development training to increase their competitiveness in the job market.
4. ILO & APINDO must also pay more attention to Aceh's handicraft businesses.
5. Over the next 5 to 10 years, ILO and APINDO should share an office in Banda Aceh in order to monitor and empower the people who are receiving such facilities.

Board of APINDO NAD:

1.	H.M. Dahlan Sulaiman, SE:	General Chairperson
2.	Drs. Fahrul Razi, Z. MBA:	Vice Chairperson
3.	Murni Muhammad, SE:	Vice Chairperson
4.	Drs. H.M. Sufi Ismail:	Secretary
5.	Marzuki Sulaiman, SH:	Vice Secretary
6.	Dra. Hj. Zahriani A. Balwy:	Treasurer
7.	Drs. Saifullah M. Zein:	Vice Treasurer

APINDO has 320 members registered in the province of Nanggroe Aceh Darussalam. Most of the enterprises operate only in the local market (at district level). Some extend their services to neighbouring districts, while a very small number sell their products/services outside the province. It has to be taken into consideration that, especially in the most remote areas where purchasing capacity is also significantly reduced, restoring the capacity of the enterprises to pre-crisis levels will not be enough to guarantee the availability of markets. The rehabilitation of the enterprises themselves will not guarantee a restart of the local economy. Unless the people who earn their livelihoods from farming and fishing have the chance to recover their sources of income soon, the enterprises will not have enough purchasers.

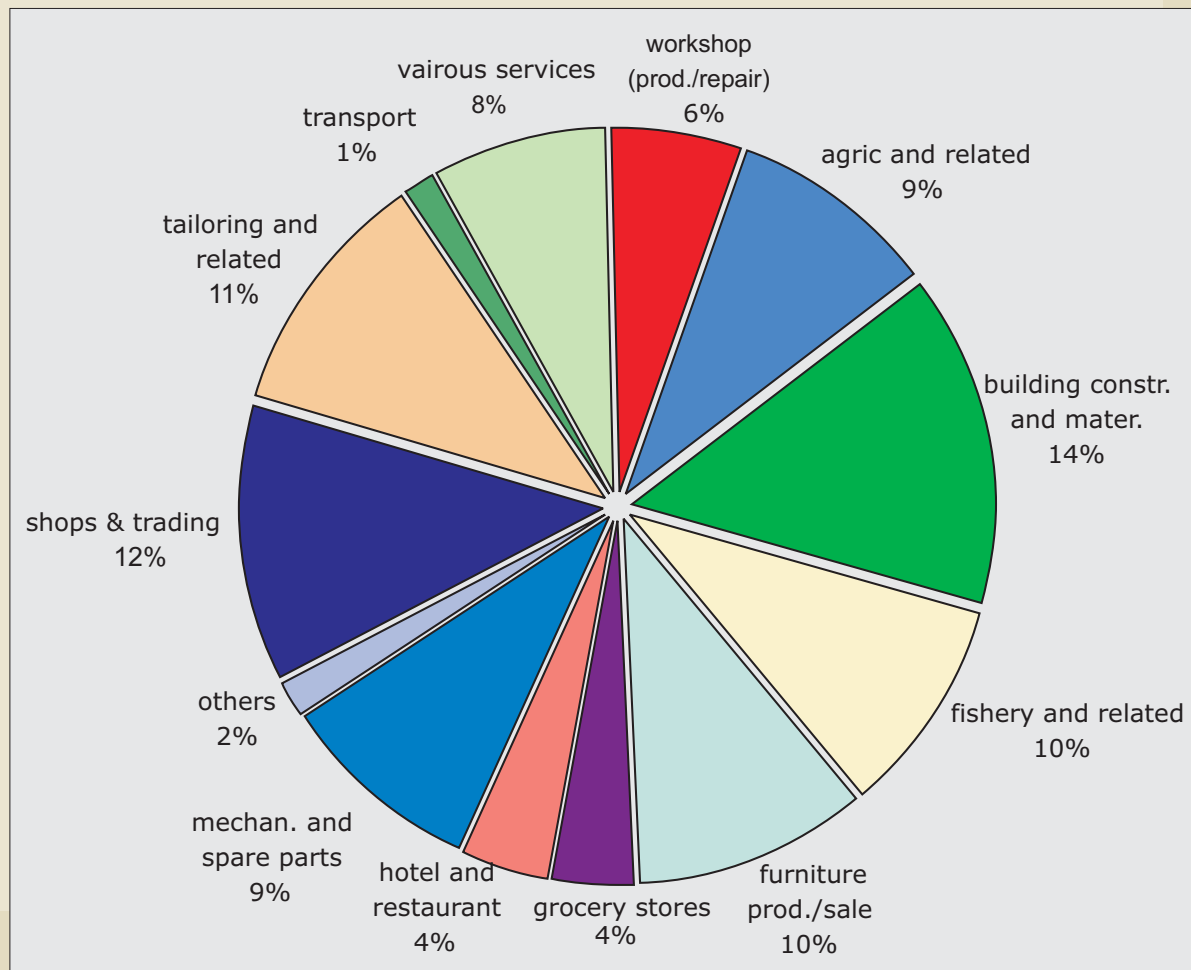
Location of markets for APINDO entrepreneurs

Local (district)	78.8 %
Neighbouring districts	15.5 %
Outside NAD	4.0 %
Outside NAD and overseas	0.7 %
NAD	1.1 %
	100.0 %

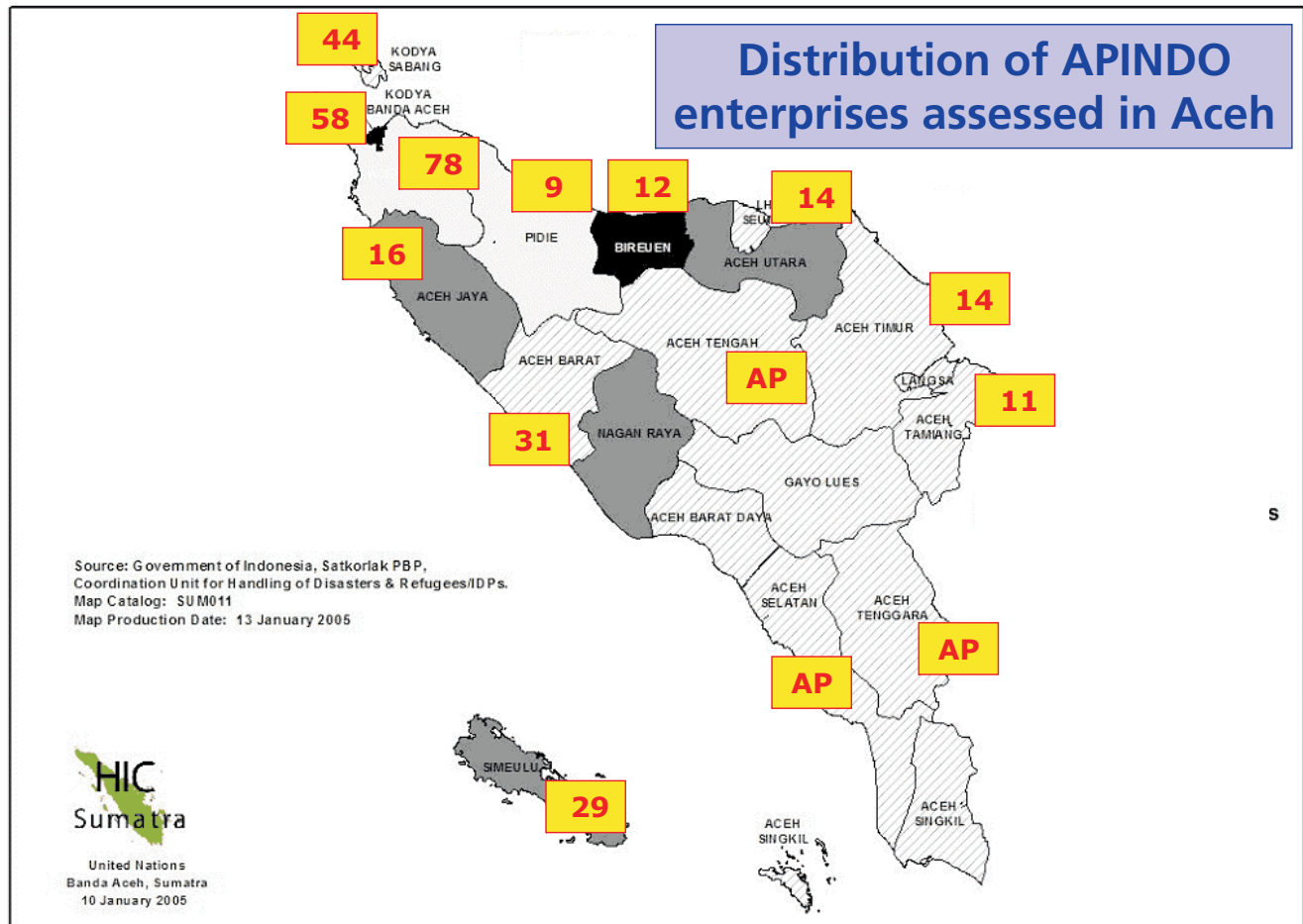
APINDO enterprises belong to the micro and small categories. On average each enterprise had 11 employees, of whom 7 were permanent and 4 part-time.

APINDO members are involved in various economic activities in the supply chain for different products and services. The pie chart below shows the business sectors to which the members belong.

The survey reached around 316 registered members of APINDO throughout the districts of Aceh that were the most severely affected by the tsunami and the earthquake.



The map below shows the distribution of APINDO members in the tsunami-affected areas. The entrepreneurs were interviewed individually but, in some cases, a relative put forward a friend or business partner due to the fact that the people in charge of the enterprise were missing or dead.



Impact of The Tsunami and Earthquakes on Apindo's Enterprises in Aceh Province

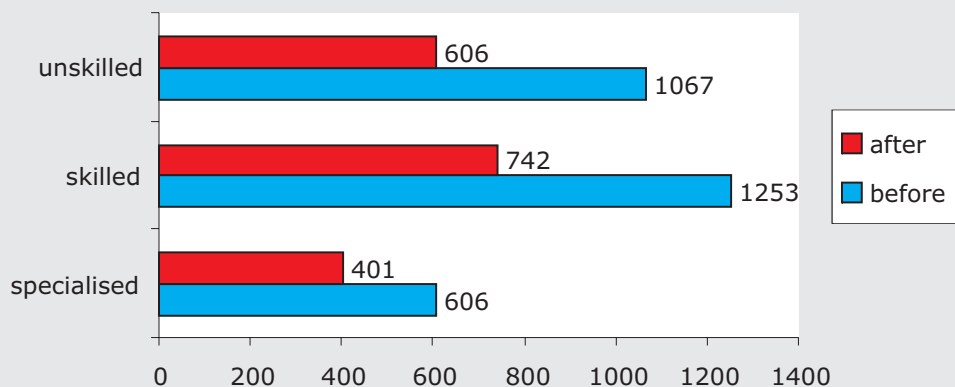
Staff

The total number of people employed by APINDO enterprises (full time and part time) prior to the disaster was 3,382. This figure also includes the APINDO entrepreneurs themselves. After the crisis the number of staff available was drastically reduced to 1935 people. This means that 43 percent of the people are now missing, and the average size of the enterprises has been reduced from 11 to 6 employees.

The distribution is confirmed by crosschecking the figures with the data collected on skills categories, where the specialised, skilled and unskilled workers lost were 33 percent, 40 percent and 43 percent respectively.

The figure for the total number of staff is slightly higher than the figure indicated by the sum of the workers in the 'per skills' category; this is probably because occasional (part time) labourers are not always included in the categories shown in the chart below.

APINDO employees "per skills" before and after the tsunami



Due to the high rate of unemployment in Aceh, recruiting new, unskilled employees will not be a problem. Especially in the most remote areas, however, employers' activities may be seriously compromised by the lack of skilled and specialised workers. Surprisingly

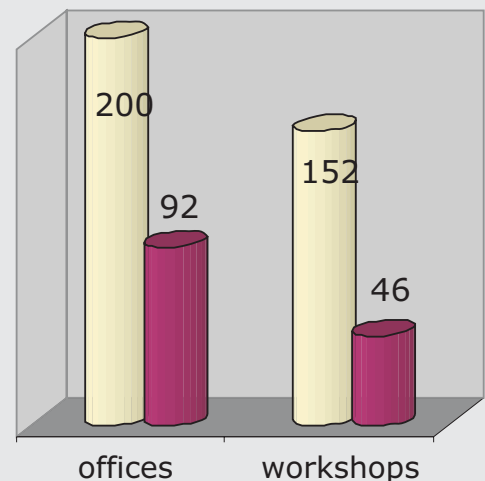
enough (see also the pie chart on page 12) very few entrepreneurs identified training as a key need for restarting their enterprise's activities. This is in contrast with the fact that one-third of the entrepreneurs declared that they regularly provided training for their staff. In any case, the provision of vocational skills training and/or upgrading training to put the enterprises in the best position to restart their activities will be a major priority. The average age of APINDO employees is 31 years of age. There is, therefore, still scope for fruitful results from training.

Due to the massive impact of the crisis, the job recovery process will take a long time. The local recovery of livelihoods must be mainstreamed throughout the rehabilitation and reconstruction effort. Enterprises, if properly supported, can play a big role in giving people opportunities to work: the construction sector in particular now has many opportunities to expand during the years to come. But to do so, enterprises need skilled workers. Therefore, if sufficient numbers of skilled people are not available, immediate training will be a priority.

Physical damage

At this point in time it is still difficult to properly quantify the damage to the buildings and equipment of these enterprises due to the immense impact of the crisis. Several villages have been completely washed away by the tsunami and the enterprises suffered the same fate. Nevertheless, it is important to geographically differentiate the impact of the crisis. Most of the western coast as well as Banda Aceh and Aceh Besar districts have been seriously affected, while the crisis impact on the northeastern coast was relatively minor. This chapter intends to give a general overview of APINDO enterprises in Aceh province.

First of all we set out to quantify the damage to enterprises' infrastructure. Not every enterprise had a real office or workshop because some of them were actually running their businesses in informal locations. Regardless of this, the data at our disposal shows a serious reduction in the number of available offices and workshops. Currently, 54 percent of the offices and 69 percent of the workshops are not functional because they were totally destroyed or badly damaged (see chart beside).

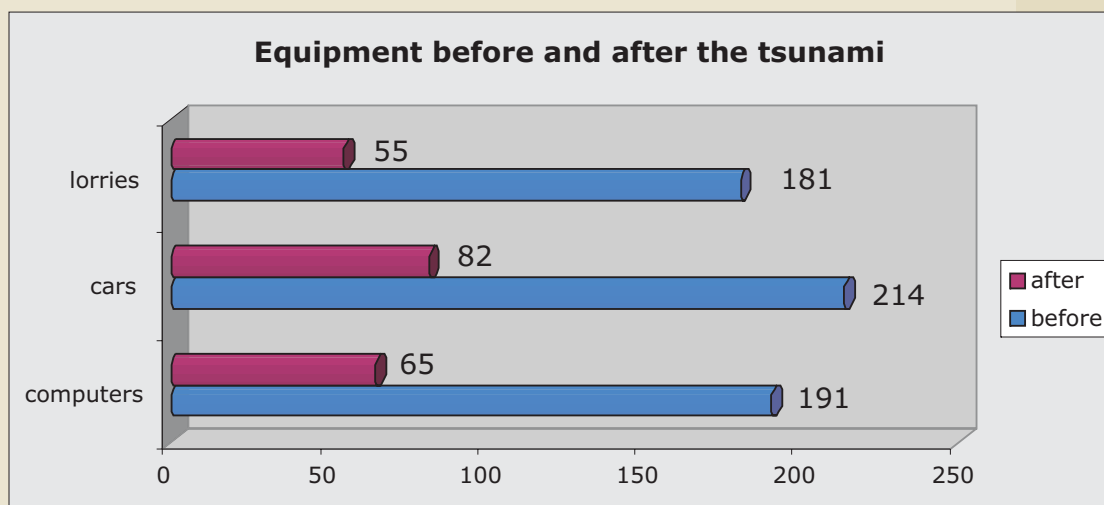


This is clearly the biggest constraint on restarting economic activities (restarting implies that at least some economic activity is up and running).

The reconstruction effort should pay particular attention to the rehabilitation of buildings from which to run economic activities because of the significant contribution employers can make to the recovery of people's livelihoods by providing them with jobs.

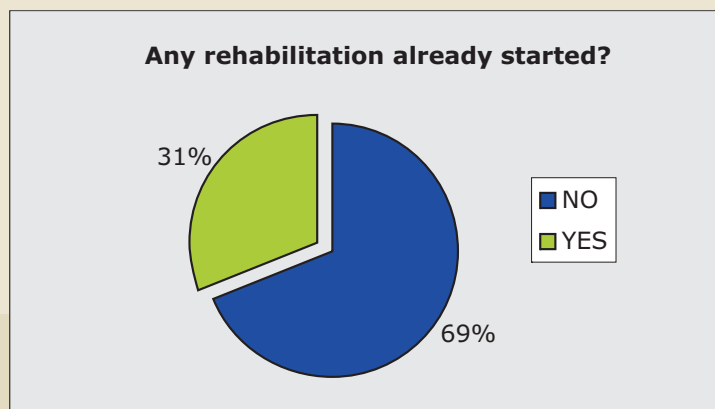
The figures collected on various items of equipment lost covers furniture, raw materials and other goods. However, the data are not accurate enough to be specified in the report. Nevertheless, three items that are easily accountable have been selected as

indicators of the lost facilities. The chart below shows the dramatic loss of essential equipment.



The same range of loss can be predicted for other types of items such as machines, tools, furniture, record books, etc.

This report aims to provide figures and indicators; therefore we can affirm that, on average, at least 60 percent of the equipment has been lost by enterprises in Aceh province. This figure is of course characterised by some degree of



estimation, but it is not considered too far from the reality. Furthermore, as mentioned above, in some areas the percentage is much lower but in others it is surely higher.

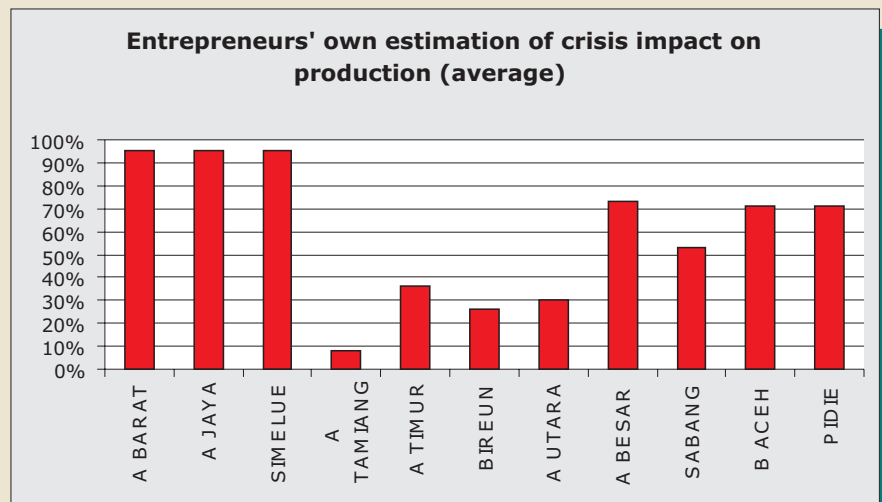
The Acehnese population as a whole responded quickly and actively to the tremendous disaster, and so did a good proportion of APINDO entrepreneurs. The pie chart on the left shows that almost a third of the entrepreneurs have already started some sort of rehabilitation in order to restart at least some of their activities.

Obviously most of the entrepreneurs who replied positively to the questionnaire are located in the less affected areas. Furthermore, it has not been possible to quantify the magnitude of the rehabilitation. Nevertheless it is logical to expect that only those who suffered minimal damage to their infrastructure are already on their way to being rehabilitated.

Impact on economic activity

On average, the crisis reduced economic activity by 68 percent. This represents a massive impact and it will jeopardise the survival of the enterprises concerned unless appropriate measures are quickly put in place in the recovery phase.

The data revealed that none of the enterprises along the western coast declared a zero percent impact on production. The less affected districts of Aceh Timur and Aceh Tamiang, meanwhile, recorded a higher percentage of response, suggesting that the crisis had no impact on their business. Conversely, close to 100 percent impact on activities was registered along almost all of the western coast and on Simelue Island. The chart below indicates the average impact on production of APINDO enterprises per district, as reported by the entrepreneurs¹.



1 It is possible that some entrepreneurs declared a higher impact hoping to receive some form of immediate financial support

The survey is intended to gather initial data concerning the capital required to return the activities to the pre-crisis level. Obviously the financial need for recovering economic activities calls for a case-by-case analysis, starting from the annual budget of each enterprise before the crisis. The following data contain a high degree of estimation but even so, it is significant to notice that on average, each enterprise will need access to Rp. 240 million (see chart on page 18) in order to return to 100 percent of their pre-tsunami business levels. APINDO enterprises throughout Aceh province would therefore require a total amount of Rp. 75 billion to restore their businesses to 100 percent of their pre-crisis activity (see also chart on page 19).



When the entrepreneurs were asked what they need urgently to recover/ rehabilitate their business they all mentioned financial support (this clearly reflects both common sense and the hope of receiving external aid). Moreover, a considerable portion specified their priority of rehabilitating the infrastructure and re-equipping their enterprises. A significant percentage did not respond to the question and this can be explained in two ways: 1) the interviewers did not fill in the questionnaire accurately enough; 2) the entrepreneurs simply wanted to indicate the need for capital as a general, primary need. The pie chart to the left shows the distribution of the most urgent needs mentioned by the entrepreneurs.

The comparison of data concerning the annual budget before and after the crisis is not reliable because much of the post crisis information is missing. The same applies to both the enterprise's expansion plans as well as the productivity ratio and operational capacity before and after the crisis. This lack of accuracy is due to the difficult conditions the interviewers faced during the submission of the questionnaire. Moreover, many entrepreneurs were not in a position to prepare a financial plan for 2005 and the years to come because they have no idea about what is going to happen to their enterprise.

This lack of accurate figures can also be seen as an indicator of the chaotic status of APINDO entrepreneurs: most of them are not really able to face the impact of the crisis on their economic activity. Therefore, immediate support to help them strengthen their capacity in terms of both crisis response and business redevelopment is definitely an issue to be addressed as soon as possible.

Status of Apindo's Enterprises by District

This section is devoted to a quick observation of the crisis impact at the district level. It is extremely important to deal with both the assessment and the rehabilitation plan, keeping in mind that the impact of the crisis differs enormously from area to area. As is well documented, the west coast has been severely affected, as well as Aceh Besar and Banda Aceh districts, and the figures presented in this section very much confirm this.

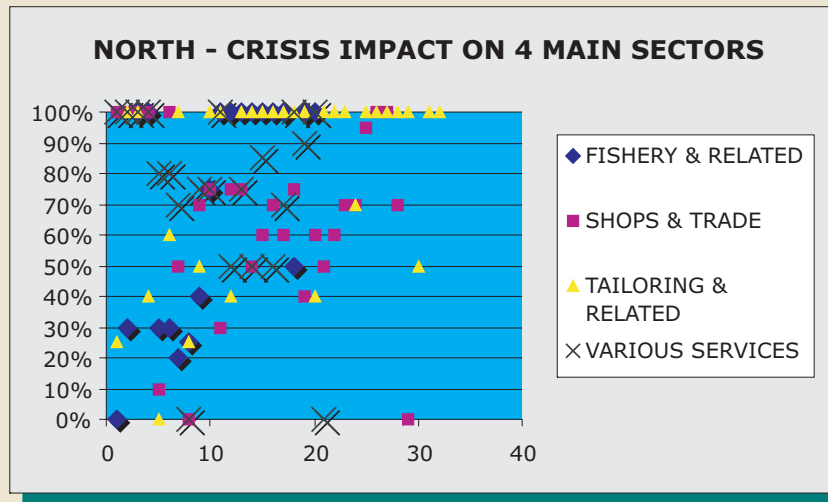
In order to facilitate geographical differentiation of the crisis impact we combined the 11 districts into three zones. These are NORTH: Aceh Besar, Banda Aceh and Sabang; WEST: Simulue, Aceh Barat and Aceh Jaya; and EAST: Pidie, Bireun, Aceh Utara, Aceh Timur and Aceh Tamiang.

The following table shows the business sectors of APINDO members in the three zones.

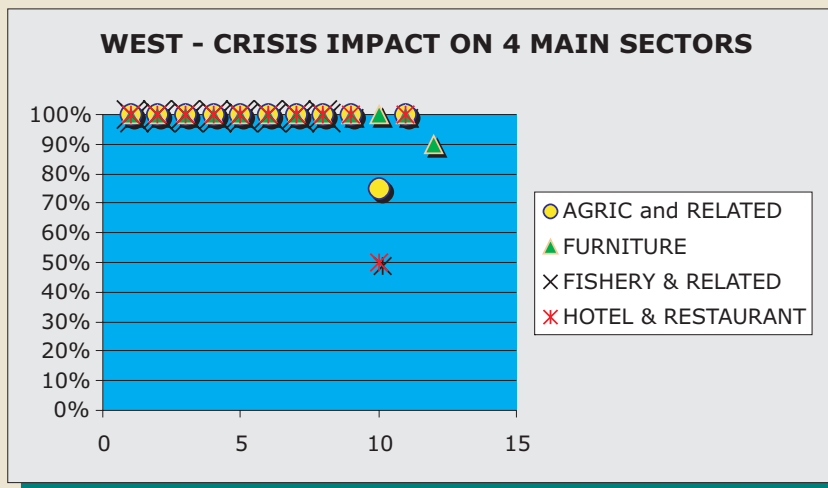
	AGRI	BUILFISH	FURN	GROC	HOT	MEC	OTH	SHO	TAI	TRA	VAR	WOR	TOT	
North	8	19	20	12	9	1	11	5	29	31	2	21	11	179
West	11	8	8	12	3	11	4	0	7	3	1	3	5	76
East	10	19	2	8	13	3	1	0	1	1	0	1	2	61
	29	46	30	32	25	15	16	5	37	35	3	25	18	316

A visual representation of the three zones across four main economic sectors is represented below:

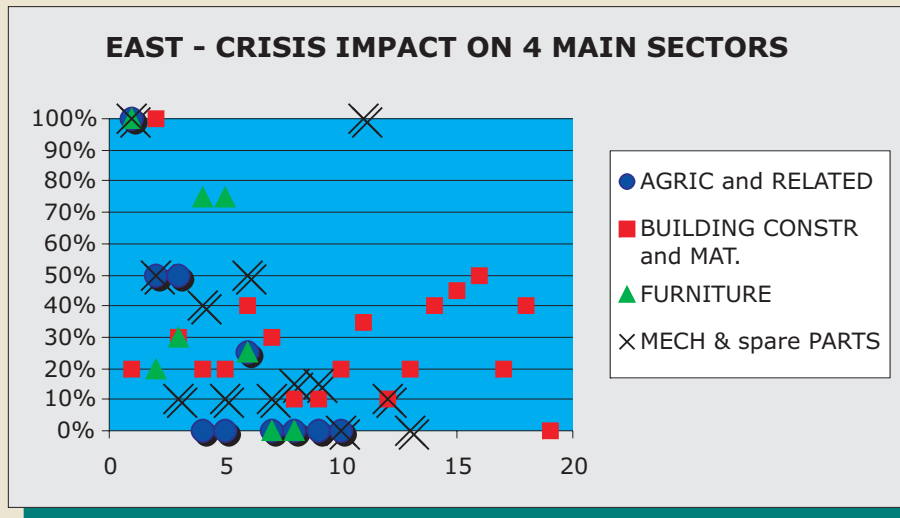
In the NORTH the impact is scattered, with no particular incidence in any of the four main sectors. On average, the impact on business is above 50 percent.



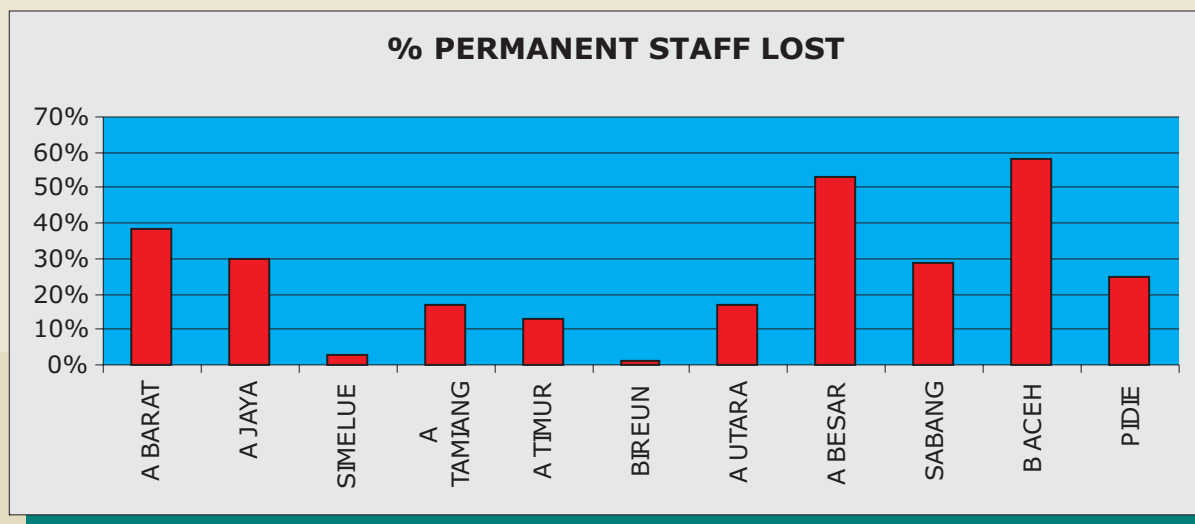
In the WEST the chart is practically unreadable, but it reflects well the chaotic situation in the area, where almost all businesses have been decimated by the crisis.



Finally, in the EAST the situation is fortunately radically different: most of the entrepreneurs declared an impact in the range of 0–40 percent. The scenario is therefore much better, and most of the businesses have restarted or can restart with fewer constraints.



The chart below shows the percentage of staff lost in the 11 districts. The most affected by the catastrophe are the most densely inhabited areas. The figures at our disposal confirm the information about Simelue Island, where very few people died compared to those living close to west coast shores where the tsunami had the same strength. This indicates the informal, historical and traditional preparedness and knowledge within the Simelue community with regard to the devastating effect of tsunamis.

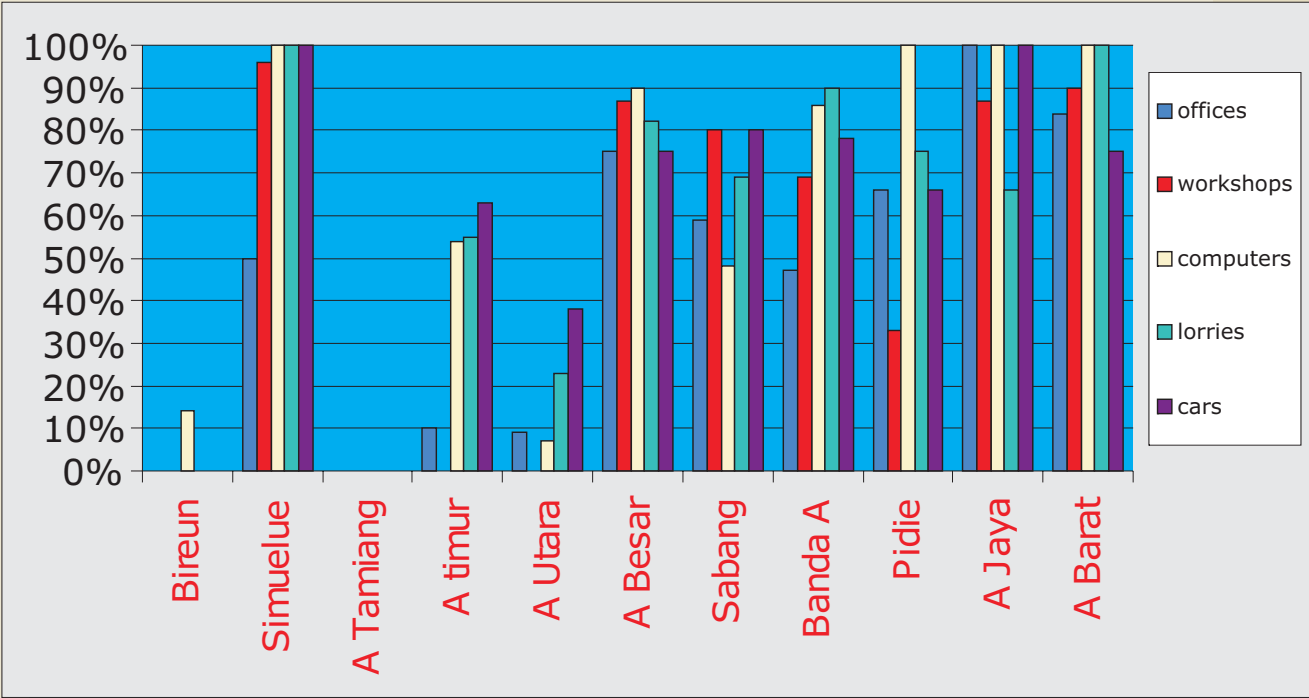


Average Size of Enterprise			
	Before	After	% Size Reduction
North	11.45	5.04	55.98%
East	10.57	9.15	13.43%
West	9.04	6.29	30.42%

The average size of the enterprises has also been reduced but with major differences among the three areas (see adjacent table).

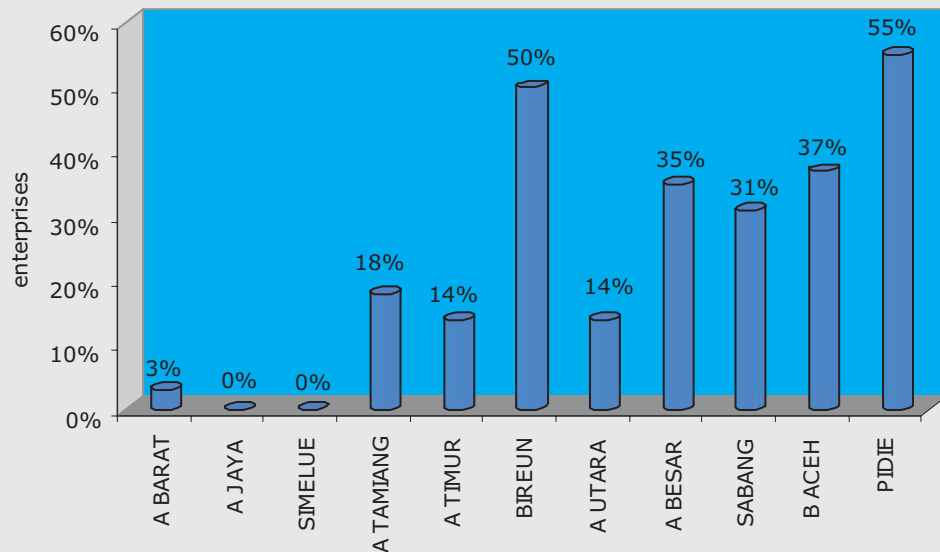
In the previous chapter the loss in terms of staff and infrastructure was mentioned. An analysis of the destroyed facilities and infrastructure (using the same five indicators) verifies a substantially different impact across these areas. For some indicators, the results may be very high in terms of percentage, but in practice only a few units have

been lost. For example, 'lost lorries' is one indicator. In Aceh Besar district before the tsunami, APINDO enterprises had a total of 51 lorries; now they have only nine. Though this is not a big loss in general terms, in relative terms it had a huge impact.

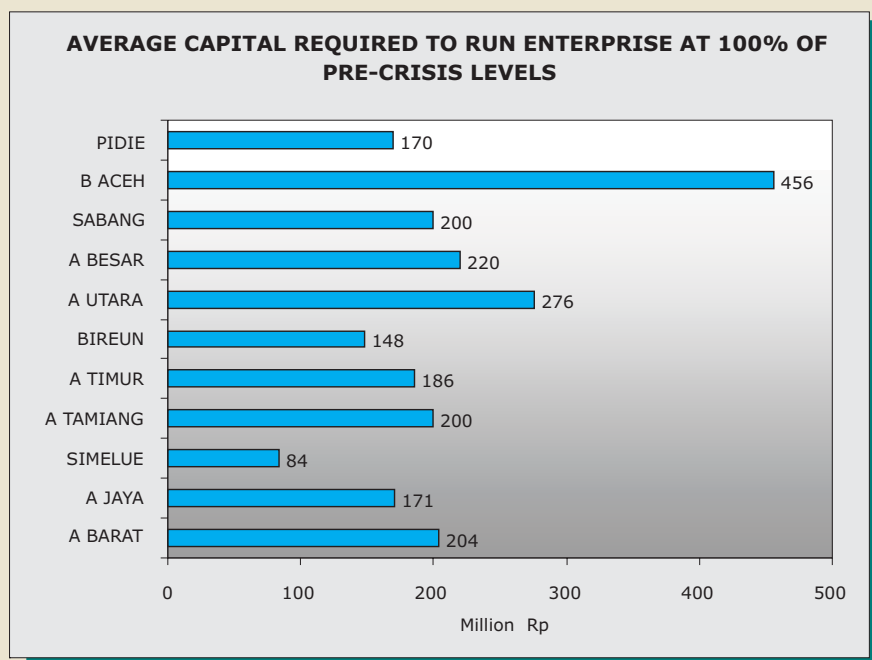


It is also interesting to compare the figures regarding the damage with the initial implementation of rehabilitation activities shown in the chart below. The more the areas are damaged the less rehabilitation work has commenced. This is explained by the fact that in the most affected areas (western coast and Simelue) the damage is so great and it extends to the whole community. As result is almost impossible to start anything at this time. It must also be clarified that initial rehabilitation, in most areas, means basically debris removal and site cleaning (especially Banda Aceh and Aceh Besar); whereas in the less damaged locations some form of infrastructure rehabilitation is already up and running. The relatively high level of rehabilitation in Aceh Besar and Banda Aceh is also due to the fact that in these districts there is a combination of totally destroyed enterprises and others that are only partly damaged.

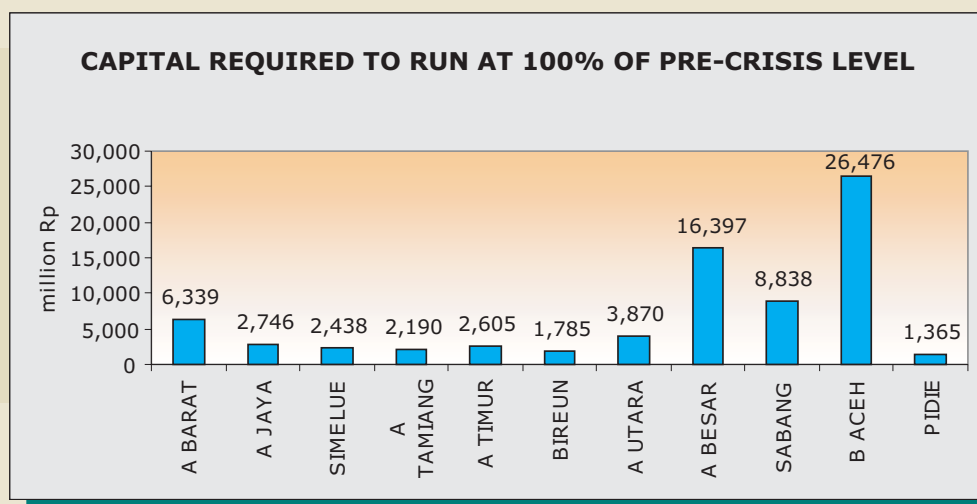
Some form of rehabilitation ongoing



On the basis of the damage assessed, it is interesting to have estimates of the capital required by the enterprises to return to pre-crisis productivity levels. The following chart indicates the average cost needed to return to a fully functioning operation by enterprise and by district. The figures are quite similar. However, they cannot be considered simply by calculating the average cost per enterprise. To obtain a more accurate estimation it would be necessary to disaggregate the data at least on the basis of the size of the enterprise in terms of employees, annual budget and degree of damage to infrastructure and equipment. Unfortunately we do not have accurate data about some of these indicators. Nevertheless, the indication of the average capital required per district is still relevant. The Banda Aceh data is much more detailed compared to the rest of the APINDO enterprises. This is because local enterprises have a larger volume of business and more extensive market networks (for which they require more equipment) than enterprises in other districts (some qualitative enquiries support this thesis). The other explanation for the 'lower' estimation for the recovery of Simulue's enterprises (which were badly affected by the tsunami) is the modest size of the local micro enterprises. The following chart shows the detailed estimates of the average amount required for recovering enterprises in the different districts.



Other information that may be useful—mainly from an APINDO perspective—is the capital required to recover members' enterprises in each district. The substantial variation from district to district is due to the different number of APINDO enterprises registered in the area, the different sizes and the different magnitude of damage sustained.



CONCLUSION

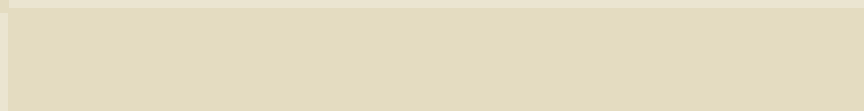
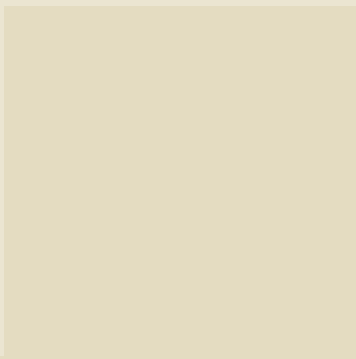
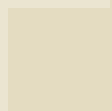
It is obvious that some of the information gathered is not 100 percent reliable. Therefore, any figures reported in this study should be considered as a initial estimate, probably not too far from the reality but definitely with room for more accurate analysis.

The impact of the earthquake and tsunami on enterprises has been severe and in some cases it is going to be difficult to restart any significant activity. On average, 40 percent of the staff and 60 percent of the equipment (including offices and workshops) have been lost.

The impact varies markedly from area to area. It is therefore crucial to take a geographical approach to addressing enterprise needs. While the eastern coast can, with immediate support, rapidly get back to pre-crisis productivity, the remaining areas need a systematic case-by-case strategy for recovering their business. On average the impact on productivity is estimated at 68 percent.

The reconstruction of enterprise premises in the most affected areas cannot start before the Government of Indonesia announces the overall master plan. APINDO enterprises will require a substantial amount of capital to restart the activities (Rp 210 million per enterprise, on average). Some enterprises are already engaged in some sort of rehabilitation work but in most cases this work concerns only minor reconstruction or even just cleaning-up operations.

Supporting the employers to restart their businesses will be a strategic move for recovering a large quantity of jobs throughout the tsunami and earthquake-affected areas of Aceh province.



ANNEX 1 Questionnaire Form

APINDO ENTERPRISES RAPID NEEDS ASSESSMENT			
NAME OF COMPANY			
HEAD OF COMPANY			
BUSINESS SECTOR			
		PRE-TSUNAMI	POST-TSUNAMI
NUMBER OF STAFF	professional		
	part-time		
SKILLS	specialised		
	skilled		
	unskilled		
Average age of labourers			
%			
Productivity (quantity)			
Annual budget			
Annual expenditure			
INFRASTRUCTURE	workshop		
	office		
HARDWARE	office furniture		
	computer		
	car		
	lorry		
	bus		