

FOOD AND LABOR MARKET ANALYSIS AND
MONITORING SYSTEM IN NANGGROE ACEH
DARUSSALAM (NAD) PROVINCE

Final Report

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EXECUTIVE SUMMARY

Introduction

Since the tsunami hit Aceh and North Sumatra in December 2004, the World Food Program (WFP) has been assisting the affected population in Nanggroe Aceh Darussalam (NAD) with food aid in collaboration with donors, NGO's and the Indonesian Government. It is likely that the continued relief/assistance, including food, will be needed until major infrastructure and housing projects are complete. As the initial emergency subsides, however, WFP is cooperating with the Government to formulate a strategy for supporting rehabilitation and reconstruction in Aceh. There is a perceived need for the continuation of humanitarian assistance until reconstruction is complete.

As a result of the tsunami, much of the food security analysis undertaken by WFP for Aceh in the pre-tsunami period in 2004 became outdated. This is due to the major changes in vulnerability and local food production that resulted from the crisis as well as the changes in food availability and food access as a result of the massive influx of assistance, both in kind and in cash. As a result, a food and labor market analysis was undertaken by an independent research institute [Indonesian Center for Agro Socio Economic Research and Development (ICASERD)] to inform WFP's decision about the appropriate scale and scope of food-based programming in Aceh, beyond meeting immediate relief needs.

The Impact of Tsunami on Major Food (Rice and Fish) Production

Before the tsunami (2004), total paddy harvest area was 382,043 hectares with total production of 1,544,747 tonnes. According to a soil fertility specialist (expert judgment), it is estimated that the productivity of 2005 will reach only 85 percent of the production level of 2004. Taking into account the performance of paddy production in 2004 (planting areas, harvesting areas and its production) and also the level of damage caused by the tsunami, paddy production in 2005 will be 1,114,715 tonnes or a drop of almost 28 percent on the 2004 production level. The decline, however, will not make NAD a rice-deficit region as it still has a surplus of around 234,650 tonnes. Of the eight districts visited during the study, only Aceh Jaya and Banda Aceh will experience a deficit in 2005, at 8,799 tonnes and 18,547 tonnes respectively.¹

The fishery sector also plays an important role in the NAD economy. Its share of agricultural GDP in 2003 was 20 percent. The coastal community of NAD relied heavily on fishery as their source of income (livelihood). Fish production has declined but NAD still has a surplus in fish production. Up to April 2005, NAD was reported as having a fish production surplus of 38,595 tonnes. From the eight visited districts, only Aceh Utara experienced a surplus while others were in a deficit ranging from 428 tonnes to 2,568 tonnes.

Major Findings

a. The Impact of Food-Aid on Food Market

Food aid did not provide a disincentive to farmers in the rice production areas in the eastern parts of NAD (Pidie, Bireun, Aceh Utara and other unaffected regions). This was indicated by the

¹ The eight district studied : Kabupaten Aceh Besar, Aceh Utara, Aceh Jaya, Pidie, Bireun, Aceh Barat, Aceh Barat Daya, Kota Banda Aceh

relatively stable price of rice at the farm-gate, which was ranging from Rp. 1,300- Rp. 1,600/kg of dried paddy during April-May 2005. Food aid has, however, been a disincentive to the traders, as indicated by the decline of trade volume and profit margin. It should be mentioned that the decline in traders' business is not exclusively a result of food-aid but also because of the damage in transportation infrastructure and fuel price hike.

Rice, fish and other food items are commonly traded not only within NAD but also to North Sumatra. Rice and paddy are transported from surplus areas such as Pidie, Aceh Utara and Aceh Timur on the west coast to various cities especially Medan, Banda Aceh, Meulaboh and Tapak Tuan. The disaster hampered the flow of rice to and from the west coast. In Banda Aceh, in particular, the damage to main market places (Pasar Aceh and Penayong) has moved the main trading places to Pasar Lambaro, Ketapang, Neusu and Ule Kareng. The effect of the tsunami on the rice trade in the east coast areas, however, is relatively small.

Food markets, including rice, are relatively competitive. A lot of traders are involved and marketing areas are quite extensive. The more open transportation system, information and price signals allow goods to flow to other regions, easily resulting in smaller price differentials between regions. After the disaster, almost everything changed dramatically. The flow of goods, especially from the west coast, has been hampered. Hence, the west coast trade has shifted from various cities in NAD to Medan. It also negatively affected the east coast trade. Some traders have gone bankrupt, and food prices in the western regions increased, though only temporarily.

The marketing cost has increased since the disaster happened in NAD. The increased cost was not only due to the increase in the price of fuel and wages, but also because of longer delivery times, particularly along the west coast. The increase in marketing costs for the destination of Banda Aceh and Medan is relatively small but to the main markets on the west coast has increased by up to 50 percent.

Markets are working sluggishly because of: (!) the shrinking market destination (Banda Aceh and *kabupaten* in the west coast); (2) the number of traders has declined significantly, especially in the destination markets; (3) traders do not want to take high risks by maintaining large stocks; and (4) most of the food aid is in the form of rice.

The price of rice rocketed to Rp. 10,000-Rp. 12,000 per kg in Banda Aceh and Meulaboh within three weeks of the tsunami. That was the critical period. After this period, the rice price was relatively stable (Rp.2,850 - Rp.3,000 per kg). Bulog's market operation and the WFP food-aid program played an important role in stabilizing the price. In addition, the rice market in NAD is open to inflows of rice from other markets (e.g. Medan).

Other food prices after the tsunami were: sugar (Rp.4,000 - Rp.6,000 per kg); wheat flour (Rp.3,600 - Rp.4,500 per kg); edible oil - crude coconut (Rp.4,500 - Rp.6,000/kg). Only bimoli (branded cooking oil) and tiger shrimp tended to increase because of high demand from higher income groups.

b. The Impact of Food-Aid on Consumption Patterns

Food aid was able to stabilize the frequency of intake, which experienced a decline during the first 2 - 3 weeks after the tsunami. Canned fish, however, is not a preferred form of fish for the local people. Internally Displaced Persons (IDP's) were reported to have relatively sufficient stocks of rice (20-40 kg/households). Many of them sold part of their rice stock to obtain cash for

the purchase of other daily needs such as sugar, kerosene, fresh fish and other non-food items. This happened because some IDP's did not receive regular living allowances. In addition, the cash for work program could not absorb all the unemployed IDPs.

Before the tsunami, the sources of rice and fish for household consumption in rural areas was primarily from self-production and the Government's *Raskin* program (for rice), while other food products were bought from local markets. After the tsunami, since most households in the affected areas are IDP's, most of the food was in the form of food-aid received from the Government and WFP.

The food aid basket comprises rice, fortified noodles, cooking oil, canned fish and biscuits. The consumption of other food was reported to be very limited. It must be mentioned that the food aid contributed to stabilizing the frequency of staple food consumption in the affected areas in NAD.

c. Wages in the affected areas.

Compared to wage rates in surrounding regions (North Sumatra, Riau and West Sumatra), NAD's rate is slightly higher. In the three provinces mentioned above, the wages were ranging between Rp.20,000 - Rp.30,000/day in agriculture, Rp.30,000-Rp.40,000/day for unskilled non-agricultural labor, and Rp.40,000-Rp.50,000/day for skilled non-agricultural labor. If significantly higher wages are paid under reconstruction activities in NAD, it might create regional imbalance, if continued for a long period and lead to market distortion and artificial inflation.

After the tsunami, the unemployment in NAD increased by more than 150 percent, from 206,000 (4.8 percent) to 528,000 people (13.3 percent). Wages in the agriculture sector both for skilled and un-skilled labor were not significantly different in western and eastern areas (Rp.40,000 - Rp.50,000 per day). But for the fisheries sector, wages in western areas (Rp.75,000 - Rp. 150,000 per day) were higher than those in eastern areas (Rp.50,000 - Rp. 100,000).

Wages in the non-agriculture sector in western areas (Rp.40,000 - Rp.80,000 per day) were also slightly higher than those in eastern areas (Rp.30,000 - Rp.75,000 per day), for both skilled and un-skilled labor. This wage rate (found at the time when the survey was conducted) is the same as the prevailing rate before the tsunami. There was a significant temporary increase in the wage rate during the 1-2 months following the tsunami when the debris clearing process was at the peak. At that time, labor was paid on a piece-based (*borongan*) system, of approximately Rp. 1 - 2 million to clear a damaged house/building.

The wage rates paid under the Cash for Work program (*Padat Karya*) were relatively the same as the labor market wage rate in the non-agriculture sector, i.e., Rp.30,000 - Rp.40,000 per day. This wage rate is not different between the western and eastern areas. There is no strong evidence that the *Padat Karya* program in the affected areas attracted labor from unaffected areas. Labor mobility from the unaffected to the affected areas occurred temporarily in the 1-2 months after the tsunami, especially during the period of clearing.

Recommendations

1. Food aid is required until the rehabilitation program is complete. Withdrawal of food should, however, be done gradually in line with the rate of recovery including the return of IDP's to their original profession and pre-tsunami level of income. Referring to the estimation done by the *Dinas Pertanian Tanaman Pangan dan Hortikultura* of NAD, the rice production in the

eastern part of the province will not fully recover until 2008, while recovery in the western part is not expected to recover until 2010. Based on these estimations, food-aid might be reduced by 15%-20% each year, depending on livelihood recovery. More accurate figures might be calculated along with on-going monitoring activities.

To improve the distribution system of food aid to the beneficiaries, it is important to reassess the IDP's condition. Some of them have already got jobs and no longer need the same level of support as before. Consequently, updating and verifying data of IDP's is important.

People's preferences should be considered in the provision of rice-aid. In terms of quantity, rice support might be reduced from 12 kg to 11 kg/capita/month. This is in accordance with the average rice consumption in NAD according to SUSENAS data of 1999 (11.33 kg) and the study result conducted by the Director General of Food Security, Ministry of Agriculture (10.97 kg). The reduction would be justified but the consumption pattern of younger members in the household should be taken into account.

Canned fish should be reduced from the current monthly ration of 1.5 kg per person. Most of the IDP's prefer salty fish rather than other processed fish. It should not be completely removed from the food basket, however, as the IDP's also need animal protein. It is also suggested to include 0.50 kg of sugar per capita per month in food-aid items, if possible.

In relation to food price and wage monitoring activities, to avoid duplication, it is suggested that the WFP uses the results of monitoring activities conducted by Bulog (NAD regional office), Dinas Indag, Dinas Pertanian Pangan, and BPS. The forms mentioned in the main report are designed to be used in rice production centres (Pidie, Bireun, Aceh Utara); the deficit regions (Takengon, Kutacane) and the central markets (Banda Aceh, Lhokseumawe, Meulaboh, and Langsa). Information on rice and paddy price should be collected monthly/seasonally, while that on wages (agriculture and non-agriculture) could be collected monthly.

Without ignoring rehabilitation of rice sector, to help IDP's back to their previous profession, more attention should be given to marine fisheries and brackish water farm sub-sectors which are the sub-sectors most IDP's belong to. The provision of equipment for catching fish is not sufficient in isolation to help marine fishermen who also need fish landing places and ice factories. Brackish water pond rehabilitation should take into account the sustainable environmental development.

In the land rehabilitation program, rice fields should be given higher priority to maintain food (rice) security. Grants and loans should be provided for rehabilitation of moderately and severely damaged land. It is not recommended to rehabilitate the lightly damaged land using loan funds.

The involvement of the NGOs and other local foundations like "*pesantren*" (Islamic Educational Foundation) would be very useful. It is expected that they will assist the government in understanding the cultural factors and in encouraging people's participation.