Executive Summary

The reconstruction of Aceh will require huge quantities of timber. This cannot be responsibly supplied from the already overstretched legitimate Indonesian sources, now unable even to meet demand for the domestic timber processing industry itself. Timber prices in Aceh have already soared to unheard of levels. Accordingly, a creative solution now adopted is to import at least part of the timber.

Prior planning for this is required to ensure the process goes smoothly. At the importer level, the Government should continue the special facilities already granted at the emergency response stage to simplify imports by granting tariff and non-tariff dispensations. At the downstream end, estimates of the volumes of imported timber for each area have been established in this study, based on the government’s plan, and the distribution mechanism ascertained.

An assessment has been made of construction needs for temporary accommodation barracks, low-cost housing, schools, public facilities - hospitals, public health clinics, houses of worship, as well as new fishing fleets.

Construction

Around 800 barracks units had already been built in 48 locations in 9 districts of Aceh by end February. The timber for these was sourced from North Sumatra, Riau and Jambi Provinces.

Three construction options are available for the low-cost housing required. Traditional all-timber, brick-walled, or the recently developed, RISHA system that uses less than half the wood of other types. The government plans to build over 11,000 all-timber houses in South Aceh, itself little damaged by the disaster and where land is at a premium. A further 31,000 RISHA houses are slated to be built independently by aid organizations.

The total minimum timber requirement for the all the planned construction is estimated at over 446 thousand m3 of sawn timber, equivalent to 1.1 million m3 of logs.

Transportation Infrastructure

The Krueng Geukuh Port in North Aceh is the best suited for the first delivery of imported timber. Subsequent ones may be made by land. North Aceh District Government is willing to arrange the logistics of the first delivery and will ensure distribution to other districts.

Potential Threats to Forest Resources from the Reconstruction

Through its use of illegally logged timber, Aceh’s reconstruction could threaten its own forests including Leuser National Park as well as the forested areas of Riau, Jambi and North Sumatra, and other islands.

Tariff and Non-Tariff Facilities/Dispensations

Once the necessary authorizations now being sought have been granted, the Indonesian Government will facilitate the delivery of imported timber through both tariff and non-tariff facilities. A Priority Track facility will be extended by the Customs office and exemption from customs import duties granted under regulations applying to donated aid for disaster relief.
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Annexes 27
I. Foreword

The reconstruction of Aceh will have extraordinarily severe consequences on the need for timber. Domestic sources of supply will be unable to sustainably meet this need for timber, considering that currently Indonesia’s forests are already finding it difficult to meet the raw material demand for its domestic timber processing industry. Accordingly, a planned creative solution is to attempt the import of timber to meet reconstruction needs.

The Coordinating Minister for Public Welfare (Menko Kesra)/Chief Executive of the National Coordinating Agency has issued a statement of support for the timber import mechanism, noting particularly that it is additional to existing aid commitments (non-pledges assistance). Several donor countries and international institutions have also already expressed their support for adopting this mechanism.

In undertaking this timber import mechanism, prior implementation design is required to ensure the proper functioning of the “import mechanism” from upstream (importer) to downstream (user). At the importer level, it is hoped the Government will grant special facilities that will simplify the timber import process into Indonesia by granting tariff and non-tariff exceptions. In turn, at the downstream level, a document is required that discusses in detail the distribution mechanism and estimates of the volume of imported timber needed for each district/municipality.

The evaluation methodology for the assessment of the need for imported timber that was used in this study is based on the government plan for Aceh’s reconstruction, which is a compilation of those from the National Development Planning Agency (Bappenas), the Coordinating Minister for Public Welfare, Office of the State Minister for Public Housing, Ministry of Public Works, Ministry of Forestry, and Ministry of Maritime Affairs and Fisheries. In turn, the analysis of the logistical preparations for the first delivery of imported timber has been discussed with the North Aceh District Government, including its Regent and the Head of the North Aceh Transportation Service. The estimated requirement for logs in this study adopts the assumption of a recovery rate of 40%, by taking into account these considerations: a) the probable condition of the timber, which may be damaged and b) inefficiencies in its use.

This study will discuss the assessment of the need for imported timber in each district/municipality in the Province of Nanggroe Aceh Darussalam (NAD), covering:
(a) construction of accommodation barracks, (b) construction of low-cost healthy housing, (c) construction of schools, (d) construction of public facilities such as hospitals, public health clinics, and houses of worship, and (e) the supply of fishing fleets, including the specification required for imported timber for Aceh. The study will highlight on the potential threats to Aceh’s forests affected by the timber requirements for Aceh’s reconstruction. It will also discuss the facilities and any import dispensations that the Indonesian Government may grant to support the aid timber import that will assist in Aceh’s reconstruction.
II. Downstream Sector: Assessment of Need for Imported Timber

2.1. Map of Minimum Timber Requirements

a. Construction of Accommodation Barracks

Based on Ministry of Public Works data, barracks construction in nine districts/municipalities in NAD Province in February was 784 units, spread over 48 locations. These barracks can accommodate an estimated 52,360 evacuees, out of an initial target of 55,320 evacuees.¹ The timber needed to build these 784 barracks is estimated at 11,760 m³ of sawn timber. At a recovery rate of 40%, this figure is equivalent to 29,400 m³ of logs. Map 1 shows the distribution of the 48 barrack locations as well as the requirement for timber for construction of barracks in 9 districts/municipalities.

The initial target for the construction of 1,000 barracks by the end of March 2005 can not be met because of various constraints, but largely because of difficulty in obtaining timber. Accordingly, this target was revised, estimating that only 800 barracks can be completed by the end of March 2005 to accommodate 9,600 KK. The construction of the remaining 200 barracks will only proceed if indeed they are still needed under the Bappenas Master Plan (blue print) scheduled to be issued on 26 March 2005.

Even in attempting to achieve this target of 800 barracks, the contractor has begun to complain about the rise in the price of timber. The legality of the sources of this timber is also dubious. Add to this that the costs of transportation and security have skyrocketed, so that by the time the timber arrives at its destination they could be 300% of normal.²

¹ The Ministry of Public Works assumes one household consists of five people, and one barrack is made to accommodate 12 households. The set target for evacuees is relatively low based on the assumption that of the around 500,000 evacuees (Bappenas data), only 35% need housing. The remaining 65% are assumed to be staying with families who survived, to have relocated out of Aceh, or are able to rebuild their own homes (from communications with Ir. Totok Prianto, Urban and Rural Affairs Director, Ministry of Public Works, February 2005).
² Field observations and information from State Owned Public Housing Company officers (February 2005).
Map 1. Timber requirements for construction of accommodation barracks in nine districts/municipalities in the Province of NAD

Currently, supplies of timber for the construction of these barracks is brought in from North Sumatra, Jambi and Riau Provinces\(^3\), apart from using found and seized, as well as donated timber— the volume of which is relatively little compared to the requirement.\(^4\) Hence, it can be estimated that the construction of the additional 200

\(^3\) Local daily newspaper reports that timber for barracks construction are also sourced from the eastern and northern part of Aceh Province (Serambi Indonesia, 27 February 2005)

\(^4\) As of February 2005, the volume of found and seized timber was still very small, i.e., 92,690.87 m\(^3\) of logs (including 85,800 m\(^3\) of logs from rejuvenation of rubber plantations) and 2,072.49 m\(^3\) of sawn timber (from 9

Sources:
- Digital map of the forest and riverine areas of the Province of NAD, Forestry Planning Agency, Ministry of Forestry (2002)
- Data on progress of barracks construction, Ministry of Public Works (February 10, 2005)
barracks, and of houses and other infrastructure will suffer delays, primarily because of the severe shortage of supplies of available timber from legal and sustainable domestic sources.

b. **Construction of Low-cost Healthy Housing (RsS-2) 36 m² Type**

b.1. **Conventional Model House**

Office of the State Minister for Public Housing (Menpera) plans construction of 122,931 homes in NAD Province, distributed throughout 12 districts/municipalities and able to accommodate up to 614,655 evacuees.\(^5\) The timber needed for construction of these is estimated at 364,367 m³ of sawn timber, equivalent to 910,918 m³ of logs (minimum scenario). Apart from that, 245,862 sheets of plywood 1.2 x 2.4 meters, x 6 mm and 122,931 sheets 1.2 x 2.4 meters x 3 mm are also needed (see timber specification in Table 1).

<table>
<thead>
<tr>
<th>No</th>
<th>Material</th>
<th>Dimensions</th>
<th>Number</th>
<th>Sawn Timber Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Beams</td>
<td>5/7 – 4m</td>
<td>32 Pcs.</td>
<td>0.448 m³</td>
</tr>
<tr>
<td>2</td>
<td>Beams</td>
<td>5/10 – 4m</td>
<td>64.53 Pcs.</td>
<td>1.3 m³</td>
</tr>
<tr>
<td>3</td>
<td>Boards</td>
<td>2/20 – 4m</td>
<td>76 Pcs.</td>
<td>1.216 m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Total sawn timber required per unit</strong></td>
</tr>
<tr>
<td>4</td>
<td>Plywood</td>
<td>6 mm</td>
<td>2 Sheet</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Plywood</td>
<td>3 mm</td>
<td>1 Sheet</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Office of the State Minister for Public Housing (February 17, 2005)*

**Map 2** shows distribution of timber requirements for house construction in each district/municipality. Seeing the distribution of the candidate locations for house construction on this map, we may guess that the determination of these locations was not based on comprehensive field observations, and does not consider the level of damage in each district/municipality as the result of the earthquake and tsunami. Hence, these locations are almost certainly sure to be unable to answer evacuees’ needs for somewhere suitable to live. For instance, the plan to construct up to 11,288 homes in South Aceh District. In fact, in reality the building damage from the earthquake within South Aceh District is very little. Apart from that, the plan to construct the 11,288 houses will naturally give rise to new problems related to the

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\(^5\) The Menpera's Office assumes one household consists of five people, so the planned construction of 122,931 homes will be used to accommodate 122,931 households.
need for land on which to build these houses, which is currently very scarce in South Aceh District.⁶

Map 2. Timber requirements for construction of houses in 12 districts/municipalities, based on the planning of the Office of the State Minister for Public Housing

Sources:
- Data on planning for construction of houses in the Province of NAD, Office of the State Minister for Public Housing (February 17, 2005)
- Estimated timber specification per unit, Office of the State Minister for Public Housing (February 2005)

⁶ From field observations and consultation with relevant parties (February 2005).
If the brick walled house model, 36 m2 type were to be adopted, based on Decree of the Minister Resettlement and Regional Infrastructure (Kepmenkimpraswil) No. 403/KPTS/M/2002 on Technical Guidelines for the Construction of Healthy Low-cost Houses, it is then estimated the timber required per house would be 2.475 m3 of sawn timber, while the houses planned by the Menpera’s Office would each require 2.964 m3 of sawn timber (see the cut-to-sized timber specification in Table 2 and the details of timber specification in Annex 1).

Table 2. Cut-to-sized timber specification for conventional model home

<table>
<thead>
<tr>
<th>Structure</th>
<th>Component</th>
<th>Size</th>
<th>Quantity (Pcs)</th>
<th>Sawn Timber Required (m3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wall</td>
<td>Vertical Siding Wall</td>
<td>2 x 20 x 4m</td>
<td>13</td>
<td>0.208</td>
</tr>
<tr>
<td>Plafond</td>
<td>Plywood</td>
<td>120 x 240cm</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wood Frame</td>
<td>14 x 6 x 4m</td>
<td>30</td>
<td>0.29</td>
</tr>
<tr>
<td>Trusses</td>
<td>Wood Beam</td>
<td>5/10 x 4m</td>
<td>35</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>Faslia</td>
<td>3 x 20 x 4m</td>
<td>8</td>
<td>0.19</td>
</tr>
<tr>
<td>Door</td>
<td>Teak Wood (Finish)</td>
<td>120 x 240cm</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wood Frame</td>
<td>3 x 15 x 4m</td>
<td>7.5</td>
<td>0.135</td>
</tr>
<tr>
<td>Window</td>
<td>Window Frame</td>
<td>4 x 8 cm x 4m</td>
<td>6</td>
<td>0.07</td>
</tr>
<tr>
<td>Beckisting</td>
<td>Wood 4/6 x 4 m</td>
<td>4 x 6 x 4m</td>
<td>20</td>
<td>0.192</td>
</tr>
<tr>
<td></td>
<td>Wood 2/20 x 4 m</td>
<td>2 x 20 x 4m</td>
<td>15</td>
<td>0.24</td>
</tr>
<tr>
<td>Casing</td>
<td>Wood Frame (Finish)</td>
<td>5 x 15 x 4m</td>
<td>15</td>
<td>0.45</td>
</tr>
<tr>
<td><strong>Total of sawn timber required per unit</strong></td>
<td></td>
<td></td>
<td>2.475</td>
<td></td>
</tr>
</tbody>
</table>

Source: Adopted from the Kepmenkimpraswil No. 403/KPTS/M/2002

Still adopting the distribution of the locations for house construction planned by the Menpera’s Office in 12 districts/municipalities, the minimum timber requirement to build the houses of this model is estimated to be 304,254 m3 of sawn timber, equivalent to 760,635 m3 of logs. The total timber requirement for the construction of a 36 m2 type house under Kepmenkimpraswil No. 403/KPTS/M/2002 is a little less than for the 36 m2 type house planned by the Menpera’s Office. However, this model would need 1,721,034 sheets of plywood, far more than the 368,793 sheets needed by the house model planned by the Menpera’s Office. The distribution of the timber requirements for building houses of this model in each district/municipality can be seen in Map 3.
Map 3. Timber requirements for construction of houses based on Minister of Resettlement and Regional Infrastructure Decree No. 403/KPTS/M/2002

Sources:
- Data on planning for construction of houses in the Province of NAD, Office of the State Minister for Public Housing (February 17, 2005)

b.2. RISHA Model House

The RISHA model is a development of the 36 m² type, low-cost healthy house requiring less timber than a conventional one. It is estimated each RISHA house only requires 1.62 m³ of sawn timber and 5 sheets of 1.2 x 2.4 meter x 4 mm plywood (see timber specification in Table 2). The development of the RISHA model primarily came about from consideration of the difficulty of obtaining timber, i.e. the result of the minimal supplies of timber from sources both legal and sustainable, as well as its high
The technical specification of RISHA model and its panel construction designs can be seen in Annex 2.

### Table 2. Summary of timber specifications for RISHA

<table>
<thead>
<tr>
<th>No</th>
<th>Material</th>
<th>Sawn Timber Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5/7 timber beams - 4 meters long</td>
<td>1.04 m³</td>
</tr>
<tr>
<td>2</td>
<td>5/10 and 6/12 timber beams - 4 meters long</td>
<td>0.50 m³</td>
</tr>
<tr>
<td>3</td>
<td>3/20 boards - 4 meters long</td>
<td>0.08 m³</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>1.62 m³</strong></td>
</tr>
</tbody>
</table>

#### b. Cut-to-sized timber specifications for RISHA

<table>
<thead>
<tr>
<th>Original Dimensions</th>
<th>Required Dimensions (pcs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.00</td>
</tr>
<tr>
<td>5/10 – 4.00</td>
<td>26</td>
</tr>
<tr>
<td>3/5 – 4.00</td>
<td>-</td>
</tr>
<tr>
<td>3/10 – 4.00</td>
<td>-</td>
</tr>
<tr>
<td>3/7 – 4.00</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Research & Development Division of Ministry of Public Works (February 2005)

The International Organization of Migration (IOM), working in collaboration with the Ministry of Public Works has proposed building 11,000 RISHA 36 m² type model houses for evacuees in NAD Province. Although the RISHA is a low-base timber house, the construction of these 11,000 units will, however, also require quite a significant volume of timber. It is estimated the total requirement to build the 11,000 houses will be 17,820 m³ of sawn timber, equivalent to 44,550 m³ of logs. This figure is close to the unused felling allocation for NAD Province’s native forest for 2004 of 50,000 m³. In addition to that, the timber supply from Aceh’s native forest would be categorized as illegal supply, while the local government’s policy on moratorium logging still exists.

The Islamic Relief Service (IRS) also plans to order 20,000 RISHA houses. Hence the minimum timber required for the construction of these additional 20,000 houses is estimated to be 32,400 m³ of sawn timber, equivalent to 81,000 m³ logs. International NGOs and other international donors also plan to build houses for Acehnese evacuees, including Catholic Relief Service (CRS), OXFAM, CARE International, and so forth. Nevertheless, these plans are also being constrained by the difficulty of obtaining legal timber from sustainable domestic sources.
c. Construction of Schools

Bappenas estimates that at least 680 schools and pesantren (islamic schools) were destroyed and 1,265 more were partially damaged. The timber requirement to repair this damage to buildings and to build new schools and pesantrens throughout NAD Province for the long term is estimated at up to 37,250 m³ of sawn timber, equivalent to 93,125 m³ of logs (minimum scenario).⁹

Map 4. Timber requirements for construction of schools and Islamic schools (pesantrens)

Sources:
- Data on level of damage of schools and pesantrens in the Province of NAD, National Development Planning Agency (February 2005)

⁹ It is assumed that the damaged school and pesantren buildings (that are still repairable) will require 50% of the total timber requirement of the completely destroyed buildings.
Map 4 shows the distribution of the minimum requirement for timber for the construction of schools and pesantrens in 15 districts/municipalities in the Province of NAD. The highest requirements for timber is in Aceh Besar District which is up to 7,036 m³ of sawn timber, equivalent to 17,590 m³ of logs. It is estimated to cover the repairing and building of 415 schools and pesantrens. Banda Aceh follows with the minimum timber requirements is up to 5,094 m³ of sawn timber, equivalent to 12,734 m³ of logs. It means that the minimum timber requirement for only both districts would reach 12,130 m³ of sawn timber, equivalent to 30,324 m³ of logs.

d. Construction of Public Facilities

Public facilities, including hospitals, public health clinics, and houses of worship also suffered severe damage, hence having consequences for the supply of the timber for rebuilding these public facilities. The requirement for timber for the repair and rebuilding of public facilities buildings in the 15 districts/municipalities in NAD Province is estimated at 15,315 m³ of sawn timber, equivalent to 38,288 m³ of logs (see Map 5). The timber requirements for the potential construction of offices and other infrastructures were not included yet into the estimation, that we believe it will undoubtedly need a huge of timber.
Map 5. Timber requirements for construction of public facilities

The Ministry of Maritime Affairs and Fisheries Data (February 2005) shows the large number of fishing boats, including motorized ones, those with outboard motors, and fishermen’s traditional boats that were damaged along the West to the North coasts of Aceh. Hence, assistance from the government and donor institutions is needed to repair and provide fishing fleets that fishermen can use to go about their normal daily activities. Map 6 shows the distribution of the timber requirement in order to provide fishing fleets in 13 districts/municipalities. The minimum timber requirement for the repair and supply of these fishing fleets is estimated at up to 17,348 m3 of sawn
timber, equivalent to 43,370 m³ of logs. The highest requirement for timber is in Aceh Jaya District, at up to 3,414 m³ of sawn timber, equivalent to 8,536 m³ of logs.

Map 6. Timber requirements for rebuilding the fishing fleet in 13 districts/municipalities

From the above calculations, the minimum timber requirement for the construction of barracks, houses, schools and pesantrens, public facilities, and fishing fleets is estimated at 446,041 m³ of sawn timber, equivalent to 1,115,102 m³ of logs. This means that, in practice, this timber requirement will naturally be far greater, considering the extensive other housing and infrastructure not yet included in this estimate of the minimum timber requirement above.

Sources:
- Data on level of damage of fishing fleets, Ministry of Maritime Affairs and Fisheries (February 2005)

f. Minimum Timber Requirement

From the above calculations, the minimum timber requirement for the construction of barracks, houses, schools and pesantrens, public facilities, and fishing fleets is estimated at 446,041 m³ of sawn timber, equivalent to 1,115,102 m³ of logs. This means that, in practice, this timber requirement will naturally be far greater, considering the extensive other housing and infrastructure not yet included in this estimate of the minimum timber requirement above.
Map 7 shows the total timber requirement for the construction of barracks, houses, fishing fleets, schools and pesantrens, as well as public facilities (minimum scenario). This timber will be very difficult to supply from domestic sources, considering that, to date, Indonesia’s forests have already had difficulty in supplying the raw material for industry. This total timber requirement could potentially soar in execution, considering the extensive construction planned that has not yet been recorded, including the plans for office building construction, and other public buildings that will naturally require large amounts of timber.

**Total timber required**

- Sawn timber : 446,041 m³
- Logs : 1,115,102 m³

**Sources:**

- Recapitulation of minimum timber requirement for constructions of barracks, houses, schools and pesantrens, public facilities and rebuilding of fishing fleets (official figures, February 2005)
2.2. Map of Potential Threats to Aceh’s Forest

The construction of barracks, houses, and the supply of fishing fleets spread throughout 19 districts/municipalities of NAD Province (there are no plans for construction in Central Aceh and Gayo Lués Districts) faces constraints in the difficulty of obtaining timber supplies. Specifically for the forests of Aceh itself, this has the potential to threaten the forested areas in the North, West and East of Aceh, as well as part of the coast on the southern end of Aceh--such as in the Aceh Singkil District. It also has a great potential to threaten the existence of the Leuser Ecosystem area, including within this the Mount Leuser National Park (see Map 10).

Map 10. Potential threats to Aceh’s forests from the distribution of locations for constructions of barracks, housing and supply of fishing fleets

Sources:
- Wide-ranging projection (February 2005)
The provision of the timber for the construction of evacuee housing is a critical issue that should be given serious attention. The potential threat to forest resources could be possibly come from the government projects and international organizations using the pretext of development and growth of new areas, for instance projects for construction of public facilities, roads, bridges, and other infrastructure. There are concerns about possible requests seeking the conversion of forests to open up access to isolated areas through construction of roads and bridges, or the conversion of forests into residential and agricultural areas. Apart from that, serious threats could also surface from widespread illegal logging, as a consequence of the opening up of access to forest areas.

2.3. The Most Realistic Requirements for Imported Timber

In order to proceed the import timber mechanism, brief information of timber used in Aceh would be helpful to determine the suitable timber used for Aceh, including the need for chemical treatment for the timber. In one side, the option to import cut-to-sized timber would be good in terms of efficiency of timber used. In the other side, it will also potentially have difficulties when the cut-to-sized timber is not sufficient for the construction, especially if the actual dimensions of cut-to-sized timber is not exactly same with the required ones.  

The following are the most realistic requirements for imported timber treatments:

a. Water content should be 10-14%.
b. Kiln dried to have killed all termite eggs and anti-fungal chemicals.
c. Wood treatment could be whatever the respective country usually provides as long as that information is listed and any necessary additional treatment could be done on-site later.
d. No timber from old growth forest, ancient forest, High Conservation Value Forests (HCVFs)
e. Certified timber is certainly preferable but not as a necessary condition.

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10 Communications between Greenomics Indonesia with contractors, architect of RISHA, and some officials at the Ministry of Public Works and Office of the State Minister for Public Housing (February 2005).
III. Map of Transportation Infrastructure for Distribution Network

3.1. Transportation Infrastructure and Port of Disembarkation

The delivery of imported timber can be classified into: (1) the delivery of free aid imported timber and (2) the delivery of commercially imported timber. The distribution of free aid imported timber will be prioritized for housing constructions from government, whereas the delivery of commercially imported timber may be directed to donors and international institutions who are planning to build housing for the Aceh evacuees, and who can buy this imported timber at relatively affordable prices.

The field observations revealed that the Krueng Geukuh Port in North Aceh District is the harbor best prepared to become the destination port for the first delivery of imported timber for Aceh. This port is an international scale harbor that PT. ExxonMobil has until now used as its marine transportation infrastructure. Subsequent deliveries of this imported timber for other districts/municipalities may be by land (see Map 8).

The adoption of Krueng Geukuh Harbor as the destination port for this first delivery of imported timber meets logistical consideration standards, i.e.:

a. It has a good telecommunications network
b. It has easy land access from the harbor to warehousing for timber storage, as well as ease of land access to housing construction locations, particularly Bireuen and Pidie districts and Banda Aceh city
c. A site office to handle the delivery of the imported timber already exists, i.e. the North Aceh Executive Coordination Unit Center (Satkorlak)
d. There are already guarantees of distribution from the port to warehouse locations, and for container temporary storage within the port area

Apart from having already met the standards for the logistic considerations above, North Aceh District is also an area categorized as a less damaged area, so it is considered better able to mobilize resources for the logistic preparations needed for the first delivery of imported timber.
Map 8. Transportation infrastructure for distribution network: Initial Stage

Map 8 shows the road route from Krueng Geukuh port, North Aceh District, to deliver imported timber to Bireuen, Pidie and Banda Aceh, and also East Aceh. This route is for the initial stage, before the road to the West coast of Aceh is passable again. Once access to this land route has been opened, then the next part of the delivery of imported timber through the Krueng Geukuh Port can be delivered to Aceh Jaya, Nagan Raya and West Aceh Districts by road. It will also be possible for the next...
stages to deliver the imported timber through Malahayati Port in Banda Aceh, so can be closer to deliver the imported timber to the West coast of Aceh (see Map 9).

Map 9. Transportation infrastructure for distribution network: Next Stages

Sources:
- Recommendations from local government officials (February 2005)
3.2. **Security and Safeguarding Mechanism**

North Aceh District Government has already stated its willingness to take care of the logistics of the first delivery of imported timber and will ensure its distribution to the districts of North Aceh, Bireuen, and Pidie. These three districts are considered able to themselves bear the cost of transportation and security from North Aceh to the housing construction locations within their respective districts.\(^{11}\) Once the delivery schedule of the imported timber has been established with certainty, a letter should immediately be sent to the Head of the North Aceh Satkorlak I Center, with a copy to the North Aceh District Head, Governor of Aceh, district and provincial chief military/police commanders in order to organize the logistics at the destination port (Krueng Geukuh).\(^{12}\) Safeguarding mechanisms should be determined at the district level, in consultation with Satkorlak in each respective districts to reach a joint agreement for official safeguarding mechanism.

This delivery of imported timber through the Krueng Geukuh port will only be subject to unloading/stevedoring and transportation charges to transport the timber from the port to the warehouse. Two empty warehouses are available in North Aceh District, i.e. a warehouse owned by PT. Pupuk Iskandar Muda and the LANAL (Navy Air Base) one. However, if this imported timber is sent in containers, it need not be warehoused (and will not be subject to transportation costs from the port to the warehouse). The containers can be parked within the area of the Krueng Geukuh Port.

Particularly in regard to these containers, the Port only has crane facilities for unloading containers up to 25 feet. To unload 40 feet containers, PT. Arun’s crane may be used. Nevertheless, if the ship transporting the imported timber is equipped with its own crane, naturally this issue will not then be a constraint for unloading at the port.

The most basic matter to be settled is the total requirement for timber to be met through the first delivery of imported timber, and its distribution to each location. So, once the timber does then arrive at Krueng Geukuh port, the North Aceh Satkorlak I Center people can immediately get to work at distributing the timber to its locations. The most concrete offer for the use of the first delivery of imported timber is to build

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\(^{11}\) Communications between Greenomics Indonesia and the Head of the North Aceh Transportation Service/Head of North Aceh Satkorlak I Center (February 2005).

\(^{12}\) The chief of staff of the regional military command at the Provincial level (Kasdam Propinsi NAD) has expressed his support to secure and safeguard timber imported under this mechanism, especially during transit from the port to construction locations (communication between WWF Indonesia and Greenomics Indonesia with Kasdam in Banda Aceh, 4 March 2005).
5,000 houses in North Aceh District.\textsuperscript{13} The minimum total timber requirement for that is estimated to be 14,820 m\textsuperscript{3} of sawn timber, equivalent to 37,050 m\textsuperscript{3} of logs. Add to this the requirement for 10,000 1.2 x 2.4 meter x 6 mm sheets, plus another 5,000 1.2 x 2.4 meter x 3 mm sheets of plywood.

3.3. Task Force

In response to the expressed support from central and local governments and relevant stakeholders at the global level, there is a need to develop a Task Force for the Timber for Aceh (TFA-TF), whose members should consist of representatives from central government, NAD government, Syiah Kuala University in Aceh and NGOs with interests in sustainable forestry and conservation. The legal basis for the authority of the TFA-TF over the importation of timber for Aceh’s reconstruction will be established through a Decree issued by the Coordinating Minister for Public Welfare/Executive Officer of National Coordinating Board for Disaster Management and IDPs. The objectives of the TFA-TF are to: i) elaborate the mechanism and supporting policies, to ensure imported timber can be brought into Aceh and ii) to ensure the resulting process for timber importation is implemented effectively, both in terms of compliance with relevant policies and operational considerations.

The scope of work of the TFA-TF will include:

- Prepare the protocol system for administrative, communication, coordination and internal working mechanism for the TFA-TF, both in the Secretariat Office in Jakarta and Banda Aceh.
- Create a secretariat for TFA-TF.
- Build the database system to support the implementation of Timber for Aceh.
- Facilitate securing financial support for the activities of the TFA-TF (it will not be sourced from State Budget).
- Prepare the protocol system for administrative, communication and coordination between the Government of Indonesia and the timber importer and relevant stakeholders concerned.
- Facilitate the negotiation process between the Government of Indonesia and the timber importer and relevant stakeholders concerned.
- Facilitate the guarantee from the Government of Indonesia to provide the duty exemption (tariff and non-tariff facilities) for the imported timber for Aceh’s reconstruction.

\textsuperscript{13} Communications between Greenomics Indonesia and the North Aceh Regent (February 2005).
• Facilitate the guarantee of “security of imported timber shipment” within the territorial waters of Indonesia.
• Facilitate the guarantee of offloading and transit of imported timber through the destination port in Aceh, including warehousing for timber storage or container temporary storage within the port area, the distribution network to construction locations and monitoring of the distribution process.

The structure and membership of the TFA-TF is described below:
I. **Government side** (to be determined at the 3rd week of March 2005)
   a. Central government (will be assigned by the Coordinating Minister for Public Welfare/Executive Officer of National Coordinating Board for Disaster Management and IDPs)
   b. NAD government (will be assigned by the Vice Governor of NAD)
II. **Non-government side** (will play the role as global, national and local facilitators in the implementation process of the Timber for Aceh mechanism)

WWF Indonesia, Greenomics Indonesia and CI Indonesia will be the NGOs involved in supporting the Timber for Aceh mechanism and play the role as global, national and local facilitators to implement the mechanism (see **chart 2**).

**Chart 2. The proposed structure of the TFA-TF from non-government side**
IV. Policy Support for TFA

4.1. Government Policy to Support the Timber for Aceh Mechanism

Timber for Aceh is an example of a sustainable development solution to meeting an aspect of reconstruction in Aceh. WWF Indonesia, Greenomics Indonesia, and CI Indonesia have been working actively through campaigning and lobbying at both the central and NAD government levels, to secure their support for a timber import mechanism as government policy in the context of Aceh’s reconstruction.

In line with the current policy to reconstruct Aceh within a sustainable development framework, the central government has officially stated its support for the Timber for Aceh, considering it to be a creative solution to meet the timber requirements for Aceh’s reconstruction. The call from the Government of Indonesia to the Governments of timber producing countries will make this policy effective.

A statement of support was signed by the Coordinating Minister for Public Welfare (Menko Kesra)/Chief Executive of the National Coordinating Agency, stressing that Aceh’s reconstruction ought to follow the principles of sustainable reconstruction, paying attention to the carrying capacity of the ecology of Indonesia’s natural forests, whose capacity continues to decline by the day. The NAD government also expressed its support for this initiative, proposing that NAD should take reconstructing Aceh in a way that it becomes a green province, and to continue the moratorium logging policy in Aceh’s forest in order to maintain the remaining natural forests in Aceh.

Outside the government system, WWF and CI will actively campaign globally using their networks to gain the support from governments, industries and relevant stakeholders.

4.2. Upstream Sector: Tariff and Non-Tariff Facilities

In the upstream sector, it is hoped the Indonesian Government will provide special facilities to facilitate the delivery of imported timber for Aceh’s reconstruction, both as tariff and non-tariff facilities. Hence, in practice, no administrative and bureaucratic constraints will be have to be faced that could interfere with rapidly meeting the requirement for timber for Aceh’s reconstruction.
Concrete support from the government for this imported timber mechanism will include provision of facilities for completion of the importation process so this is simpler and speedier, considering that the imported timber is aid material, and not commercial. In Customs office terms, such a facility is called a Priority Track, or a facility within the customs services mechanism for imports that is given to importers who have a very good reputation and meet the requirements/criteria set to get special service, so the completion of the importation process will be simpler and speedier.\textsuperscript{14}

Apart from this simpler and speedier importation process, this timber import mechanism is very worthy of being given a dispensation of exemption from import duties. This refers to the rule that all gifted, sent, imported goods for religious, good works, charitable, and cultural purposes should be given exemption from customs and import duties. Value Added Tax (PPN), Luxury Goods Value Added Tax (PPnBM), as well as Income Tax (PPh) Article 22 on Imports, should not be applied to such sent imported goods that have been granted exemption from customs and import duties.\textsuperscript{15}

In turn, in relation to the clearance of imported goods, the Head of the Customs Office is also authorized to grant approval for this clearance with a suspension of import duty, customs duties, and tax connected with imports (Vooruitslag) of those imported goods required for dealing with emergencies (natural disasters).\textsuperscript{16}

The above facilities have been put into effect for imported aid goods for the national disaster in NAD Province during the Emergency Response Phase. This means the policy can also be adopted for imported aid timber for Aceh’s reconstruction, in the following stages:

\begin{itemize}
  \item The imported aid timber must obtain a Letter of Approval for Provision of Aid from the Coordinating Minister for Public Welfare or his designated official, which is then copied to the Head of the North Aceh Customs and Excise Services Office. The letter must be accompanied by a list of all the sent timber (type, sizes, volume, customs value, means of transportation, the aid provider, together with a Gift Certificate).
  \item The Letter of Approval for Provision of Aid from the Coordinating Minister for Public Welfare (Menko Kesra) or his designated official. This letter is then treated as a request for goods (timber) clearance with the suspension of the payment of customs duties (BM) and import taxes (PDRI), and is at the same time a written guarantee.
\end{itemize}


\textsuperscript{15} See Law No. 10 / 1995 on Customs and Minister of Finance Decree No. 144/KMK.03/1997, No. 231/KMK.03/2001, and No. 254/KMK.03/2001.

The Chief of Customs Department of Customs and Excise issues a decision on permission for goods (timber) clearance with the suspension of the payment of customs duties (BM) and import taxes (PDRI), copied to the Menko Kesra and Dir. Gen of Customs and Excise.

Timber clearance using PIBT (special imported goods notification) and issuance of SPPB (the letter of notification of goods/timber clearance)

The Menko Kesra submits a request for global exemption from customs duties and import taxes to the Minister of Finance through the Dir.Gen of Customs and Excise. After getting this approval of the Minister of Finance, the Dir.Gen of Customs and Excise issues a written Decree on Exemption from customs duties and import taxes for these aid goods (timber).

The Chief of Customs Department of Customs and Excise prepares a PIBT definition based on that written Decree.

During its transportation, the imported timber must be accompanied by its import documentation, and need not have a Legal Timber Transportation Permit (SKSHH) document. The potential threat of smuggling of illegal timber together with the loads of this imported timber is very low, considering that the species of imported timbers (non-tropical wood) will naturally be different from those of domestic (tropical) timber. Nevertheless, coordination with the North Aceh Forest Service and Transportation Service is required to facilitate the transportation of the imported timber to its destination locations.

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17 See Minister of Forestry Decree No. 126/Kpts-II/2003 on Regulation of Timber Commercialization.
Chart 1. Administrative tasks should be completed to support the imported timber mechanism

1. Pre-notification from each Importer of Aid Timber for Aceh

2. Coordinating Minister for Public Welfare
   - CC: Minister of Finance
   - CC: Minister of Trade
   - CC: Minister of Forestry
   - CC: Minister of Transportation

3. Letter of Approval for Provision of Aid
   - List of goods:
     - Sort of goods
     - Type
     - Volume
     - Number
     - Customs value
     - Means of transportation
     - Aid provider
     - Gift Certificate

4. Decree on Goods Clearance Permit with Suspension of Payment of Customs Duties and Import Taxes
   - CC: Head of North Aceh Customs and Excise Services Office

5. An application for global Exemption from Customs duties and PDRI to the Minister of Finance, copied to the Dir. Gen. Customs & Excise
   - CC: Coordinating Minister for Public Welfare
   - CC: Dir. Gen. Customs & Excise

6. Approval from Minister of Finance

7. Decree on Goods Clearance Permit with Suspension of Payment of Customs Duties and Import Taxes

8. Logistical Preparations at Krueng Geuku Port
   - Advice of Arrival of Imported Aid Timber at Port to Head of North Aceh Satkorlak Center
   - CC: North Aceh Regent, NAD Governor, district/provincial chief military/police commanders

9. Guarantee of transportation of goods from port to warehouse, or guarantee of placement of containers within the port
   - CC: Head of North Aceh Customs and Excise Services Office

10. Coordination of transport of timber from North Aceh to housing construction locations in other districts/municipalities
    - CC: North Aceh Forest Service
    - CC: North Aceh Transportation Service
    - CC: District Head/Mayor concerned
    - CC: Forestry Service of district/municipality
    - CC: Transportation Service of district/municipality

As an application for goods clearance with the suspension of payment of customs duties and import tax (PDRI)

As a written guarantee
Annex 1. Technical specification for conventional model home (referred to Decree of Minister of Resettlement and Infrastructure No. 403/KPTS/M/2002)

<table>
<thead>
<tr>
<th>No</th>
<th>Structure</th>
<th>Component</th>
<th>Size</th>
<th>Volume</th>
<th>Unit</th>
<th>Note</th>
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<td>Stone - Foundation</td>
<td>-</td>
<td>4.2</td>
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<td>-</td>
<td>1.7</td>
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<td>Sand Fill -</td>
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<td></td>
<td></td>
<td>Earth Fill -</td>
<td>-</td>
<td>5.4</td>
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<td></td>
<td></td>
<td>Sloof Concrete 45 x 20 cm</td>
<td>-</td>
<td>1.5</td>
<td>m3</td>
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<tr>
<td>2</td>
<td>Floor</td>
<td>Ceramic (alternative)</td>
<td>30 x 30 cm</td>
<td>40.0</td>
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<tr>
<td></td>
<td></td>
<td>Concrete -</td>
<td>-</td>
<td>1.5</td>
<td>m3</td>
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<td>3</td>
<td>Wall</td>
<td>Brick Stone 18 x 12 x 5</td>
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<td>79</td>
<td>m3</td>
<td>5,925 pcs</td>
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<td></td>
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<td>Vertical Siding 2 x 20 x 4 m</td>
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<td>13</td>
<td>pcs</td>
<td>0.208 m3</td>
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<td>4</td>
<td>Plafond</td>
<td>Plywood 120 x 240</td>
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<td></td>
<td>Wood Frame 14 x 6 x 4 m</td>
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<td>m3</td>
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<td>Trusses</td>
<td>Wood Beam 5/10 x 4 m</td>
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<td>0.70</td>
<td>m3</td>
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<tr>
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<td></td>
<td>Faslia 3 x 20 x 4 m</td>
<td>8</td>
<td>pcs</td>
<td>0.19</td>
<td>m3</td>
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<td></td>
<td></td>
<td>Bolt an Nut Ø 12 mm</td>
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<td></td>
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<tr>
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<td></td>
<td>Plate Strip 4 x 4 m</td>
<td>6</td>
<td>pcs</td>
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<td>Ring Balk (Concrete) 15 x 15 cm</td>
<td>1.01</td>
<td>m3</td>
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<tr>
<td></td>
<td></td>
<td>Begel Ø 12 mm</td>
<td>18</td>
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<tr>
<td>6</td>
<td>Roofing</td>
<td>Zinc Roof 240 cm</td>
<td>32</td>
<td>pcs</td>
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<td></td>
<td>Zinc Ridge 50 x 8 m</td>
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<td>7</td>
<td>Door</td>
<td>Nail Roof 10 cm</td>
<td>5.0</td>
<td>kg</td>
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<td>Teak Wood (Finish) 120 x 240 cm</td>
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<td>pcs</td>
<td>0.135</td>
<td>m3</td>
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<td>Wood Frame 3 x 15 x 4</td>
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<td>pcs</td>
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<td>(5 pairs)</td>
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<tr>
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<td>Door Hinge 3&quot; Inches</td>
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<tr>
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<td></td>
<td>Door Key -</td>
<td>4</td>
<td>pcs</td>
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<td>8</td>
<td>Window</td>
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<td>pcs</td>
<td>0.07</td>
<td>m3</td>
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<td></td>
<td>Window Hinge 2 Inches</td>
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<td>pcs</td>
<td></td>
<td>(6 pairs)</td>
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<tr>
<td></td>
<td></td>
<td>Window Grandle -</td>
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<td>pcs</td>
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<td>Glass 5 mm</td>
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<td>Section</td>
<td>Description</td>
<td>Type</td>
<td>Unit</td>
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<tr>
<td>9</td>
<td>Bath</td>
<td>Stall (small room) (water closed)</td>
<td>Standard</td>
<td>pcs</td>
<td>(6 pcs)</td>
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<td>Floor Drain</td>
<td></td>
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<td></td>
<td></td>
<td>Tap</td>
<td>Standard</td>
<td>pcs</td>
<td>^ pcs</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Bath Tubs Corner</td>
<td>Small</td>
<td>pcs</td>
<td>^ pcs</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Water</td>
<td>Water Service State Owned Company</td>
<td>-</td>
<td>ls</td>
<td>^ ls</td>
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<tr>
<td>11</td>
<td>Mechanical</td>
<td>Cable NYA 2,5 mm NYA 2,5 mm</td>
<td></td>
<td>roll</td>
<td>^ roll</td>
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<td>Electrical</td>
<td>Cable NYA 1,5 mm NYA 1,5 mm</td>
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<td>roll</td>
<td>^ roll</td>
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<tr>
<td></td>
<td></td>
<td>Double Stecker</td>
<td>-</td>
<td>pcs</td>
<td>-3 pcs</td>
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<td>Switch</td>
<td>-</td>
<td>Unit</td>
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<tr>
<td></td>
<td></td>
<td>Electricity Plug</td>
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<td>Unit</td>
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<td>Ceiling Lump Fixture</td>
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<td></td>
<td></td>
<td>Isolation</td>
<td>-</td>
<td>roll</td>
<td>-6 roll</td>
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<tr>
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<td>Lamp</td>
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<td>pcs</td>
<td>-20 pcs</td>
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<tr>
<td>12</td>
<td>Bekisting</td>
<td>Wood 4/6 x 4 m 4 x 6 x 4 m</td>
<td></td>
<td>pcs</td>
<td>20 pcs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wood 2/20 x 4 m 2 x 20 x 4 m</td>
<td></td>
<td>m3</td>
<td>15 m3</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Wall</td>
<td>Colomb</td>
<td></td>
<td>m3</td>
<td>0.702 m3</td>
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<tr>
<td></td>
<td></td>
<td>Plaster</td>
<td></td>
<td>m2</td>
<td>194 m2</td>
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</tr>
<tr>
<td>14</td>
<td>Casing</td>
<td>Wood Frame (Finish)</td>
<td></td>
<td>pcs</td>
<td>15 pcs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anchor</td>
<td></td>
<td>pcs</td>
<td>28 pcs</td>
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</tr>
</tbody>
</table>

|               | Total of Sawn Timber Required                  |          |        | 2.475 m3   |

<table>
<thead>
<tr>
<th>Building</th>
<th>RISHA Components</th>
<th>Alternative Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations</td>
<td>Node and Panel STR 1 (RISHA)</td>
<td>-</td>
</tr>
<tr>
<td>Beams Columns</td>
<td>Node, Panel STR 1 &amp; Panel STR 2 (Risha)</td>
<td>-</td>
</tr>
<tr>
<td>Trusses</td>
<td>Panel STR 1, Truss feet (RISHA)</td>
<td>-</td>
</tr>
<tr>
<td>Roof Covering</td>
<td>-</td>
<td>Corrugated Iron or cement fiber, Concrete Tiles, Shingles, etc</td>
</tr>
<tr>
<td>Floor</td>
<td>Floor (RISHA)</td>
<td>Cement 5 x 10 x 20cm, or Ceramic tiles, etc</td>
</tr>
<tr>
<td>Walls</td>
<td>Solid Panels, Window Panels, Door Panels (RISHA)</td>
<td>Pozzolan brick, plastered red brick, Partition Panels</td>
</tr>
<tr>
<td>Septic Tank</td>
<td>-</td>
<td>90 cm diameter cast concrete pipe</td>
</tr>
<tr>
<td>Ablutions/WC</td>
<td>Fiber floor set (RISHA), bathroom Partitions</td>
<td>Conventional</td>
</tr>
<tr>
<td>Fresh Water</td>
<td>-</td>
<td>Bored well, Government Utility piped</td>
</tr>
<tr>
<td>Electricity</td>
<td>-</td>
<td>NYM, Electric lighting, Capacity 450 watt</td>
</tr>
</tbody>
</table>

*Source: Research & Development Division of Ministry of Public Works (February 2005)*
This Panel made by 3/5 wooden frame and covered in 1 (one) side (out side) by calcium Silica board (waterproof) size of 1.20 m x 2.40 m
Door panel frame made by 3/5 wood and a part covered by calcium silica for outside part. Door panel made by wooden frame and covered by plywood both side 0.90 m x 2.00 m.
Windows frame made by 3/5 wooden.
Window made by frame and clear glass. 
Bottom side of panel covered by Calcium Silica Board