



BANDA ACEH FIELDTRIP REPORT

Prepared by

Kelvin Zuo

Supervised by

**Dr. Regan Potangaroa
Dr. Suzanne Wilkinson**

**Department of Civil Engineering
School of Engineering
The University of Auckland**

August 2006

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Kelvin Zuo, University of Auckland, Research Assistant to CARE (04/09/06)

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Introduction

Major discussions and analysis within this report will be focusing on the timber procurement process of CARE International Indonesia (CII) and the relationship model of new contract with BRR¹. The paper will start with a review of existent organizational structure of CII in order to understand the information flow and feedback level occurring in current procurement practice, followed with analysis of proposed procedures and available guidelines on local and international timber supply. The co-existing opportunities and challenges coming with new relationship with BRR will be discussed in the following chapter with analysis of BRR itself and its serial guidelines on Aceh reconstruction and the changing roles of involved parties in the near future. Some other interest points and activities during this fieldtrip will be highlighted in the following section. Conclusions and some recommendations based on the above-mentioned analysis will then be made at the end of this report.

Organizational structure/ matrix of CII

In order to have a better understanding of the information flow within the organization, which is a crucial factor to be considered in procurement process, an overall organigram is identified during a series of interviews within different sections of CII. Although it is far-fetched and unrealistic to categorize the overall structure into a certain kind of existed model, a projectized pattern within CARE could still be recognized. As many other projectized organizations, CII is suffering from several inherent setbacks of this model, such as duplication of efforts on similar project, lack of horizontal communications within different functional divisions (e.g. procurement to technical team, financial department to project team, etc.), inconsistency in the ways in which policies and procedures are carried out in different project groups, growing sense of “we-they” divisiveness, stockpiling equipment and technical assistance to ensure future availability within the team, and uncertainty about what will happen when the project is completed, some of those are easily visualized now, some are not while remain as a potential threat to the future project. However, advantages are also coming with this kind of projectized organizations: higher level of staff commitment, swift decision making, centralized authority, shortened vertical communication lines, etc. How to emphasize and enlarge the good part and reduce the side effects of existed structure should appear on the priority list alongside of reconstruction mission. To change the overall structure and implement a new one is impossible and unnecessary, but small modifications within appropriate context may result in another story; some of these ideas are already spontaneously matured into actions in CII with more to be expected.

An analysis of CII's structure will be carried out in this chapter using different matrix organizational models to identify the information flows and operating pattern between different sections of CII and relationship of this pattern to procurement process. In order to connect more closely the theoretic analysis with practical situation, data and examples collected during several interviews will be used. Conclusions and recommendations will be made at the end of this report.

¹ Aceh and Nias Rehabilitation and Reconstruction Agency (Badan Rehabilitasi dan Rekonstruksi), representative and coordinating body of Government of Indonesia in tsunami reconstruction process

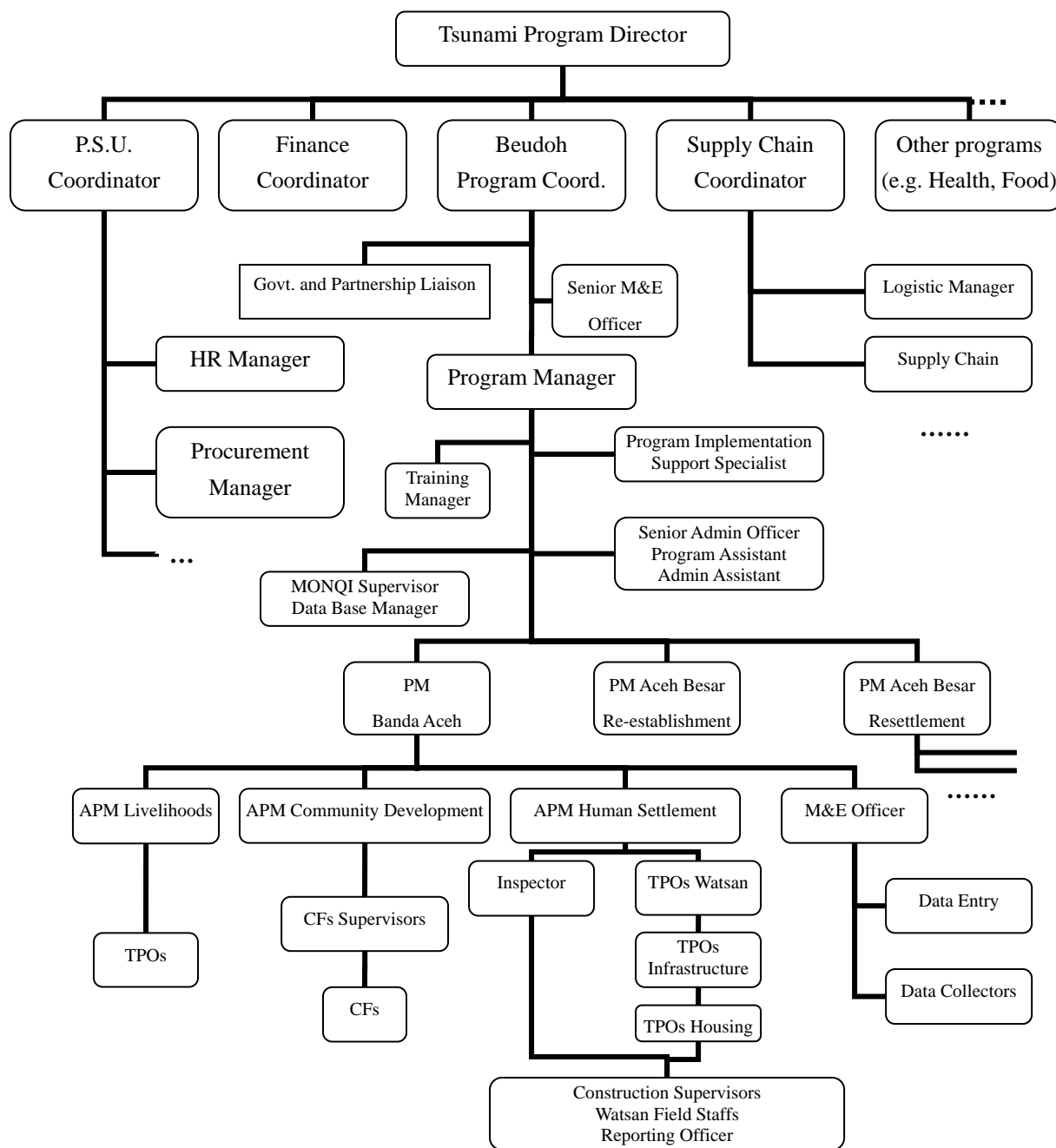


Table 1: Sketch Organisational Structure of CII

The above organisational structure is based on sketches from several interviews during this fieldtrip. As mentioned before, a projectized pattern could be recognized as the coordination lines (usually the same as information flows) of the project are vertical between various project managers and their own staffs. The opposite model of this would be a functional organisation where the project coordination line is horizontal between different functional managers. The projectized form is preferred when the organisation engages in a large number of similar projects, which is likely the case of currently undergoing housing program in CII.

Take a typical process of material procurement for example: First, the requirement is estimated and reported to on-site construction supervisors; a detailed quantity list is then prepared and

submitted with standard documents to project manager, reviewed and approved, and then submitted to program manager, approved again, then to Beudoh program coordinator, if nothing wrong, finally forwarded to TPD at top for approval. Then the requirement list is sent down through PSU (program support unit) to procurement manager to prepare a detailed procurement plan accordingly and if in a large volume, consequent tender and negotiate with potential vendors are necessary. Financial department is then involved for funding code designation for final funding approval. If all the above processes are successfully accomplished, materials purchased and delivered either directly to the construction site or to the warehouse. During the interviews, the author has been told that the driver sometimes even surprisedly to find same materials are purchased before and now stocked in same warehouse waiting to be used. Then question is “who should check the warehouse before place an order”, probably nobody should as it is not their responsibility. The same materials were purchased likely by some other PM and the problem is they do not talk too much about their own projects to each other. But again, why should they talk to each other about they brought how much of what on when? This is a small example of lack of horizontal communication; this specific problem could be easily solved by PMs simply check the warehouse before place an order. It probably will not happen again in CII. But similar problems may arise between other critical horizontal links if this communication is not facilitated by the structure. Other complaints are heard about cooperation between project team and other departments. Someone in the project office said he has to shuttle several times a day on his motorbike to get approvals or just submit required documents to financial department located in main office, sometimes due to the errors in figures or false formats been used, his whole day will be spent on transportation. One single financial staff in the project office will save the whole trouble.

When the project requires the integration of inputs from several functional departments, such as financial, procurement, etc. and does not require all the technical specialists to work on a full-time basis, then the matrix form is the only satisfactory solution. Put into the organisational structure of CII, a matrix form is a more balanced structure with emphasis on horizontal coordination line where the vertical project system still remains the first priority. Take the structure under PM level in table 1 for example, a matrix form will require 3 APMs in livelihood from different projects coordinated by a livelihood manager (could be one of them) and sometimes even work together for one project apart from their own to cater for the need of whole program. Different structures of matrix organisation are given out in appendix D for further references. Conclusions and recommendations regarding the organisational aspects are made at the end of this report.

Timber, Timber, Timber

The procurement of legal and sustainable timber remains the headache of almost every organization involved in Aceh reconstruction. As mentioned in a CARE’s report on supply chain management (CARE July 2006), “whilst timber has been previously procured, it has not been without delays and the quality in some cases has been questionable.” In this chapter, the author will start with a review and general introduction of timber supply problems inherited in Indonesian context. The possibility and proposed procedure of procuring local and international timber will then be analyzed. Alternative sourcing of using steel trusses (or steel high-pitch roof),

windows, doors and ventilation frames or coconut trees as structural component in shelter construction (may likely the case in Simeulue Island) as a replacement of timber products will also be reviewed. This chapter consists of three sections, namely, 1.timber supply problems, 2.timber procurement procedures, 3.review of other options. Conclusions on timber procurement issues will be made at the end of this report.

Timber supply problems

Although seriously damaged during 2004 Tsunami in costal areas, 70% of mainland Aceh is still covered by natural tropical forests, which is the best remaining part of tropical forests in Indonesia and rich in biodiversity (see appendix C). One can easily visualize the beautiful green land under the plane when flying over the Sumatra Island. It is the natural gift inherited by generations of Indonesian people but now forced “open for exploitation” (Indonesia-Relief News). In spite of a moratorium on logging in Aceh implemented pre-Tsunami, extensive illegal logging is currently taking place in Aceh forests, this is usually referred as related to a so-called “Timber Mafia” situation, this term is used to describe a consortium of government officials, army, police, businessmen, etc who allegedly conspire together to gain large profits from the illegal logging of the forest estate. Problems in getting legal and sustainable timber supply for reconstruction are frustratingly experienced by almost every agency over last one year and the situation could continue for longer. It is like thirsty in a sea of water one can not drink when waiting for legal sources for months but passing by the local timber warehouse right in front of the office everyday.

The Government of Aceh (represented by BRR regarding reconstruction) is reviewing its timber policy in light of the Tsunami and the need for timber for recovery. The acting Governor is in favour of a “Green Aceh” with no logging and supporting WWF and other conservation NGO’s programme promoting the use of imported timber from sustainably managed forests for reconstruction; this is also supported by the Ministry of the Environment. In order to facilitate the process, BRR had a Timber Helpdesk set up in its main office in Banda Aceh two months ago and is currently working with other government departments to prepare a standard guideline for timber procurement and transportation (the English version was under translation when the author left Aceh). On the other hand, Government of Aceh realized the tremendous needs for legal timber supply within the area. At the end of last year, Indonesian Ministry of Forestry decided to restore forest concession (HPH) to 11 companies in Aceh to enable them supplies timbers needed for Aceh reconstruction and agreed to increase timber quota for Aceh to 400,000 cubic meters for 2006. This decision has to be made as so far timber suppliers from other provinces, such as Riau and Kalimantan, are reluctant to cater for the needs in Aceh due to high cost of transportation and complicated process of applying for legal documents (i.e. SKSHH) to facilitate the transportation.

It is estimated in a recent survey (BRR and The World Bank 2006) conducted by BRR and The World Bank that bribes and illegal payments that truck drivers pay on the Banda Aceh - Medan road to corrupt police, military, state officials and preman (criminal) groups at various security posts and weigh stations are Rp. 340,000 on average (single trip on either direction). This not only constitutes a major cost for timber transportation but also has negative influences (a feeling of illegal) to potential timber dealers from outside provinces. However, the amount of illegal

payments experienced a significant decline in last 3 months associated with the pull-out of troops and police from Aceh province mandated by the Helsinki peace agreement.

These problems were realized by CARE and well addressed in its own timber policy (appendix C). CII is positively seeking different options locally and internationally as aiming for a diversity of timber sources while carefully consider associated risks with every path. For example, on Simeulue Island, CII proposed to use milled seized timber (timber cut by companies pre-Tsunami but confiscated by government) and coconut timber as an alternative with backup plan of legal plantation grown timber supply from other provinces that originally designated for Banda Aceh. While in Banda Aceh, procurement team is constantly meeting with potential local suppliers as well as participating in various policy meetings held by BRR and other government organisations. CII also encouraged the co-management approach based on community-based natural resources management (CBNRM) to facilitate the recovery and sustainable management of community forests as part of future disaster mitigation plans rather than logging concessions operated by large companies.

There are other specific problems in timber procurement process faced by CII, such as the legitimacies of importing timber and associated timber treatment methods. It is partially due to confused and sometimes conflicting information from different government sources, which could only be explained as internal uncertainty and inconsistency with Indonesian timber policies and failure in execution of established standard regulations. The Government of Aceh, after significant debate between the Ministry of the Environment, the WWF, other conservation NGOs, the Ministry of Forestry and FAO, has ruled that timber may only be imported via government-to-government donations. If so, CARE will thus be bound to procure all of its timber within Indonesia. However, from other sources (Douglass July, 2006), the author has been told with other option of importing timber overseas and guaranteed with photos (see appendix B) of currently undergoing timber supply chain procedures from British Red Cross.

Appropriate wood preservation methods that should be used remain as another confusing matter, the author has been told during a BRR's timber policy meeting that CCB and CCF² are the only treatment methods accepted by Indonesian Government, which are different from most of western standards. If that is the case, how could the international donation of timber been approved before? And based on that, can we use other internationally-accepted standards? The answer given by a senior consultant of BRR is "you may", but of course only if you will not be stopped by any check point set out by police. During the same meeting, a list of 25 local timber supplier companies approved by BRR as reliable in legal timber supply is given to representatives from various NGO's, which several days later reduced to a list of 5 and handed out to local project managers during another local staff meeting, and only recommended as reliable, not guaranteed as legal. The responsibility of ensuring legality of procurement with those companies remains on NGO's shoulders. It is almost impossible for any organisation to take out such a big risk (even one piece of illegal timber will result in the whole package being confiscated) and operate anyway.

² similar treatments as CCA (Chromated copper arsenate)

Timber procurement procedures

However, even in such a difficult situation, timber for Aceh reconstruction is still procured legally and sustainably, or at least non-illegally and non-unsustainably, from some sources to some organisations. All of them can be categorized either as locally supplied or internationally imported/donated. The procedure of each way will be introduced and generally reviewed:

International timber procurement

A flow chart of international timber procurement procedure is developed as below based on an introductory paper of suggested purchase flow prepared by Ralph Douglass from British Red Cross during the time of this fieldtrip (Douglass July, 2006).

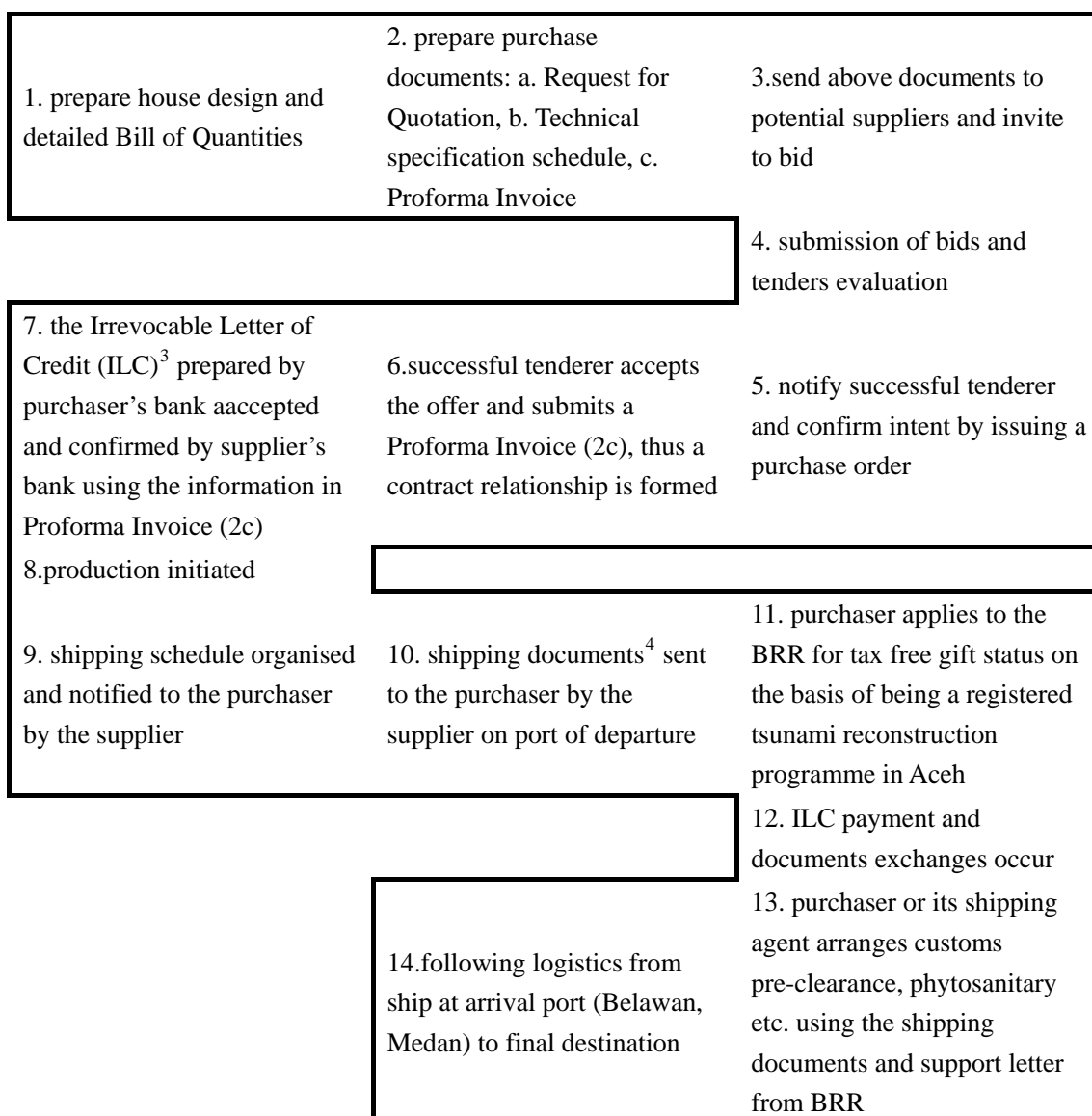


Table 2: Flow chart of international timber procurement procedure for Aceh reconstruction

Imported timber from New Zealand or Canada using above procedures usually been treated to a Hazard Class H3.1 standard for an above ground application. The specific treatment method is LOSP (Light Organic Solvent Preservative) rather than CCB and CCF used in Indonesia. The prices range from USD\$420-590/m³ CIF (Cartage, Insurance and Freight) at Medan depending on required grade, treatment and processing options, while local timber prices is usually within USD\$350 – 550/m³ from legal sources. Although the price is understandably higher than the local one, there are several advantages of importing timber for Aceh reconstruction.

The first one is the longer and guaranteed durability and protection from weather changes and insects and fungi attack under Indonesian conditions. It has an internationally recognized

³ the basis and payment terms of international timber trade, almost no suppliers will start purchasing logs or initiating production without a satisfactory ILC confirmed by their bank first.

⁴ including documents of clearance of goods through customs and quarantine requires: a. Invoice b. Packing list c. Phytosanitary certificate from port of loading d. Air Bill or Bill of Lading (B/L) as a substitute for other documents but only possible for a temporary period

guarantee of sustainable management and production of timber with other internationally recognized 3rd party certification and audit of treatment standards, certificate of origin and chain of custody. Another advantage is the large amount of availability (30,000 – 40,000 m³/month if long term orders are placed) while uncommitted local supply is limited to approximate 1/10 of that from international sources. The supply chain is simplified and bureaucratic process of applying SKSHH⁵ and other legal documents from Government of Aceh could be avoided. And most importantly, one log from international sources been used in Aceh, one tree from local tropical forests could be saved.

However, some disadvantages are obvious and made this option less attractive when decisions are made. Besides the higher prices, longer delivery schedule (at least 4-6 weeks, but generally believed as 10 weeks) often excludes it out of further consideration. The required amount of timber is limited at each time of procurement thus the large availability of international sources is not an advantage anymore. This is partially due to the lack of overall supply chain management and communications between procurement and project teams. A large order of timber, which could be streamlined and procured at a lower price as a whole, usually being subdivided into small packages with only several hundreds cubic meters per each and procured once in a while in a longer and complicated timeline. But it naturally fits into the construction progress and usually is the case. Storage of large amount of international timber is another problem associated, the consequences of demurrage charges are extremely expensive if the shipment has to be left at the port. Timber is a natural product that must be kept dry and out of direct sunshine if possible thus the warehousing facilities are essential in the following logistics from port to construction site, while local timber could be delivered to the site at vendor's expenses as required each time. Probably the uncertainty of legitimacies within Indonesian context of imported timber as a donation and standard treatments required contribute as the last straw to the unpopularity of international timber procurement.

Local timber procurement

Similarly, in order to understand the local timber procurement procedure, a flowchart was developed and handed out as a guideline by BRR at a meeting held in UNDP during this fieldtrip, demonstrated as below:

⁵ a legal document for cross-provinces timber transportation, only valid per truck per travel

Procedure for obtaining recommendation of timber transportation
Program Rehabilitation and Reconstruction NAD-NIAS

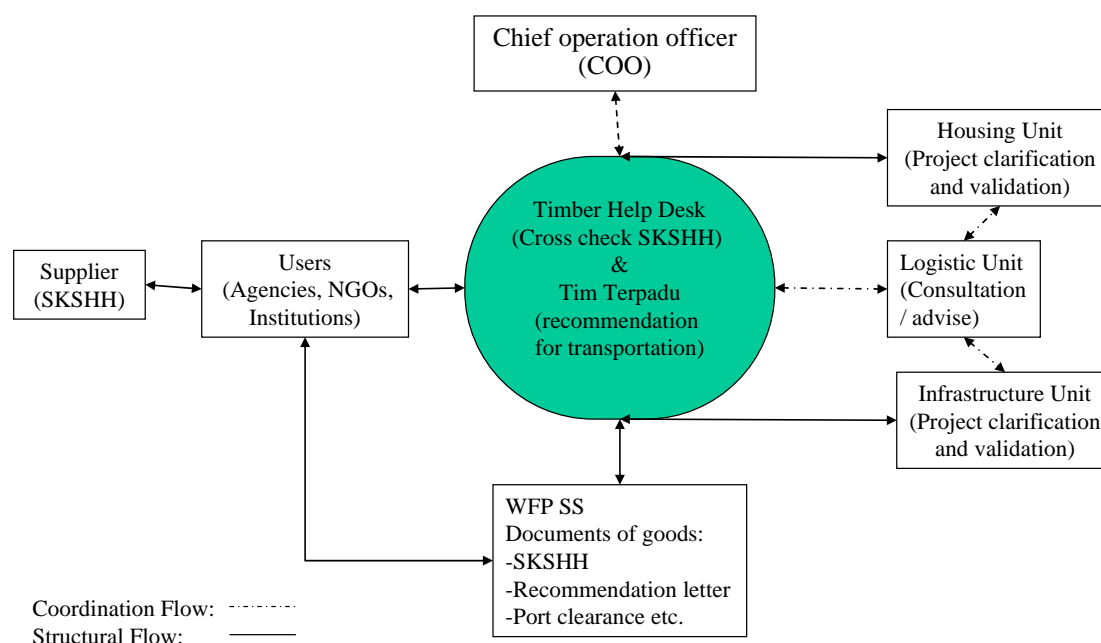


Table 3: Local Timber Procurement Procedure Guideline from BRR

Although aiming at providing recommendations for timber transportation, this flowchart could also be used as a guideline for local timber procurement and associated logistics. There are some terms used only in Indonesian timber industry that worth explaining. The big circle in the flowchart represents Timber Helpdesk and Tim Terpadu in BRR headquarter, which is the most important interface to users, suppliers, shipping agencies and other departments in Government of Aceh. Timber Helpdesk⁶ is designed by BRR in order to address timber issues for reconstruction and rehabilitation in Aceh and Nias. It has a dual role as to facilitate the demand and supply of timber and to monitor the timber used for reconstruction within this region. SKSHH appears many times within the flowchart, as explained in footnotes before, it is a set of document used to define the legality of timber and it is required when the log is transported from the concession companies to the industry or when semi wood products are ready to be marketed and transported to their final destination. There are seven sheets/attachments in one set of SKSHH in order to cross check timber documents from the original place to destination by various authorities. And since SKSHH is used only for one type of transportation, for a typical timber delivery from West Kalimantan to Banda Aceh, as soon as timber arrives in Belawan port in Medan, the deliver person has to report within 24 hours to Forestry Officer in Belawan in order to obtain a new SKSHH for the timber delivery by land transportation from Belawan to Banda Aceh. It is worth noting that SKSHH is not required for imported and donated timber.

A typical procedure for local timber procurement could be categorized into 3 steps with 3 relationships between timber user/ purchaser and other involved parties, demonstrated below:

⁶ now represented by Mrs. Saodah Lubis from Indonesian Ministry of Forestry

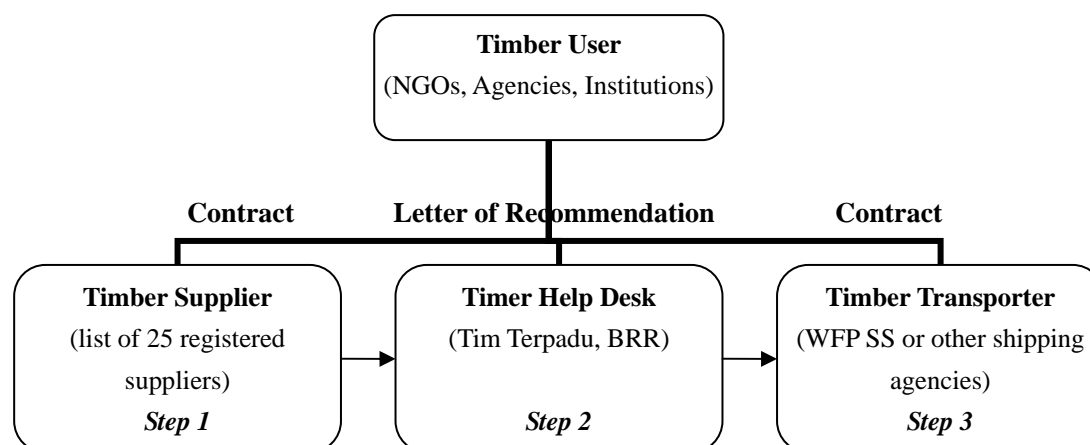


Table 4: Typical Procurement Procedure for local timber supply

As can be seen from above table, in order to procure local timber, the user has to contact a potential supplier based on the names registered with BRR in step 1 and finish the classical tendering process within this step and enter into an agreement or formal contract with one of them. After this, the user moves to step 2 and submits a request to Timer Help Desk or directly to Tim Terpadu in BRR for a Letter of Recommendation to purchase timber. In order to process this request, Tim Terpadu has to check with its Housing Unit and/ or Infrastructure Unit for the project clarification and validation to make sure that the user is permitted to order timber and that the amount and type of timber requested is in accordance with their needs (see flowchart in Table 2). Photocopies of the user's Project Concept Note⁷ and the Contract in previous step are required in order to issue the recommendation letter. Then in step 3, the user has to provide photocopies of end products of step 1 and 2 (Contract and Letter of Recommendation) together with an order request to the timber transporter and enter into another contract for transportation. The transporter recommended by BRR to reconstruction agencies in Banda Aceh is the shipping services provided by WFP (World Food Programme).

In overall aspect, it is important that the timber user understand the definition of legal timber and has its own assurance measures in obtaining only legal timber. Legal timber as defined in a BRR guideline (BRR July, 2006), means that the timber is harvested from legal concessions in accordance with national regulations. Legal concession is a legal timber company that holds a permit for forest utilization from Ministry of Forestry. The user can purchase timber or timber products directly from merchants, but the responsibility of obtaining legal timber remains as user's effort. All the timber bidders to CII are required to provide valid forestry permit as well as SKSHH as a pre-qualification for tender.

Review of other options

As alternative ways to limited timber supply, other options of materials for construction are explored and reviewed by organisations involved in Aceh reconstruction. Representatives of those methods are the suggestions of using steel trusses (or steel high-pitch roof), windows, doors and

⁷ Project Concept Note should be approved beforehand by BAPEL BRR, the executing agency.

ventilation frames or coconut trees as structural component as replacements to timber products.

On the way to Banda Aceh for this fieldtrip, the author contacted the Singapore branch office of Zamil Steel, an international company in the pre-engineered steel buildings industry, and later in Banda Aceh had the quotation from their Jakarta office based on the drawings of CARE Core House Type 45-A: design, manufacture and supply of Pre-Engineered Steel Roof System for 1 unit of type 45-A house is US\$2100 (CIF Port, less or equal to 500 units). This price is much higher even than the quotation obtained by CII from another local steel company in Riau 2 months ago, which was Rp13,792,570 (approximate US\$1483) for the same house type.

High prices become a main obstacle for using steel trusses as replacements to timber. Several factors may contribute to the problem. It is understandable that steel is expensive than timber, but this difference could be reduced if less steels are needed for a roof than timber needed for a timber truss. Actually, a steel high-pitch roof required much less steel in volume than a traditional timber truss roof. The reason why the price is still high is partially because the steel roof systems commercial available now are in mass production, mainly cater for the needs as factory storage and heavy industry buildings. The prices of steel roofs for Tsunami relief houses could be much reduced if all the reconstruction agencies with same intention in Aceh organize their individual requests into a big order and choose both local and international companies with reliable reputations for a competitive tender for mass production. It is easier said than done. However, the current coordinating agency BRR with growing power may be able to do this for its prefabricated houses in the future. Another concern about the use of steel trusses is the acceptable level by the community. People are more conservative in remote area such as Simeulue, whether they are willing to move into a “light and shining” steel roof house is still unclear. This will require thorough work of on-site community participation and socialization beforehand.

Coconut trees as another source for timber as “palmwood” worth more explores and studies. It is a relatively new timber resource but has huge potential to ease the pressure on the world’s rainforests, especially in Banda Aceh coastal area, as an ecological substitute to endangered and limited hardwoods. They usually come from farmed plantations of old coconut trees and really are an enormous source of timber that until now have been a wasted by-product from fruit and food industry. More and more experiences are gained in recent years as people have recognized and explored the potential use of this vast, alternative supply of timber and found that it performs as well as or even better than traditional hardwoods.

The colour tones of coconut timber range from dark brown to light golden tones with density changes from high to low, which is somewhat exotic and attractive for construction materials. Its mechanical performance according to different densities⁸, as approved by series of laboratory tests, is sound for structural properties. Usually, the outer, harder part of coconut trees is used in structural materials for building construction, flooring/decking and furniture design, while its relatively soft inner core is suitable for cladding, screening and homewares. This could be used as profitable by-products for the milling workshop owners if mass production of coconut timber for

⁸ High-density palmwood (dermal) – hard: 600-900 kg/m³; Medium-density palmwood (sub-dermal) – medium/hard: 400-600 kg/m³; Low-density palmwood (core) – soft/medium: 200-400 kg/m³

construction is feasible in Aceh in the near future. Another advantage is as the coconut palm is branchless, palmwood is free from knots, which makes it an ideal timber. However, rise again is the level of acceptance by the affected community and forestry authority. This makes the mass production of coconut timber almost impossible in Aceh and only as a good idea in theory. But since more and more research results and real life experiences in favour of this option available internationally, it is a good opportunity to explore this idea further in Aceh to cater the massive needs for timber.

CII realised the usefulness of coconut timber and included this option in the fourth point of its timber policy as: “On Simeulue, prototype houses and trial village will use milled seized timber, coconut timber (in collaboration with the NGO CONCERN) or legal plantation grown timber from other provinces of Indonesia (if supplies of seized timber and coconut timber is inadequate to meet local needs).” (see appendix C)

Opportunity and challenge: shaking hands with BRR

CARE Indonesia is now on the transformation phase into a new contract relationship with BRR for its future housing program. According to the latest progress report (14 July – 21 July) the author had in fieldtrip, 71.5% of total 1763 CARE’s housing targets on mainland (excluding future CARE-BRR targets) are now still under construction, with 18.2% (320) of those mainland targets are not begin yet. The situation on Simeulue Island is even worse given the remoteness thus increased difficulties in material procurement and comparatively limited attention from BRR and central government, which is understandable considering the situation on mainland. Opportunities and challenges are both existing and revealing themselves along the way of official confirmation into this new contract, detailed analysis is required for this role-changing model in order to add values in this process to CARE in achieving its overall mission.

The emphasis of this chapter will focus on the opportunities and challenges CARE is now facing and relationship model for this new partnership with BRR.

BRR: who, when and how

Since its establishment under the Indonesia Government Regulation No. 2/2005 on 28 April 2005, the Agency of the Rehabilitation and Reconstruction for Aceh and Nias (BRR) soon take over the leadership in reconstruction effort within broad Aceh and Nias territory. Although been consequently denied in many occasions, BRR is actually changing from its initial setting as a coordinating body into an official implementing authority over the last 16 months, especially when given the power to contract directly. In order to have a better understanding of BRR and its role in this complicated reconstruction market, a series of important events in relation with BRR will be reviewed and the major policies and guidelines generated along those events will be analyzed in a sequent timeline.

Right after the emergency response phase following the deadly Tsunami finished in 2005, the

Government of Indonesia assigned the National Development Planning Agency (BAPPENAS) to coordinate the establishment of a rehabilitation and reconstruction plan for Aceh and Nias, which later become the well-known “Master Plan” (*Rencana Induk*) for Aceh recovery. Apart from reviewing the needs for the redevelopment of the areas affected by the disaster, the Master Plan also outlined the need to establish an agency responsible for the coordination and implementation of the rehabilitation and reconstruction plan for Aceh and Nias. One day after the Master Plan was set in law on April 15, 2005, the Indonesian President Susilo Bambang Yudhoyono declared the establishment of BRR in Government regulation in Lieu of Law No. 2/2005. Two weeks later, three administrative bodies were established in order to govern and provide guidance to the agency, namely, an Executing Agency, an Advisory Board, and a Supervisory Board.

The responsibility of the agency to redevelop Aceh and Nias, as emphasized in the Law No. 2/2005, was embodied in its principle assignments being to manage projects funded by the Indonesian Government’s National Annual Budget (APBN) and to coordinate projects funded by donors and foreign NGOs. This dual role requires capacity in terms of human resources, organizational structure, decision-making procedures as well as the ability to supervise coordination on the ground. In the beginning phase of the assignment, a series of implementation policies, an organizational structure and various standard operating procedures were developed by BRR to enable coordination, leadership and quality control of the numerous activities being implemented by government agencies, donors and NGOs. Some well known examples of its policies and guidelines are: “BRR Policy Guidelines for the Provision of Resettlement Assistance to Victims of the NAD/Nias Tsunami and Earthquakes” regarding the right of return and housing based on Master Plan and earlier BRR Guidelines on land mapping, village planning, and house rebuilding; “BRR Guidelines for Infrastructure Redevelopment in Tsunami Affected Areas” together with “BRR Infrastructure Implementation Plan” define the basic rules for village reconstruction and dimensions and price limits for construction of the main house and repairs, set up practical scenarios for the implementation of infrastructure with different involvement levels from various agencies; the final English version of “Village Planning Guidelines” provides a detailed elaboration on a series of separated guidelines issued by BRR in June 2005 known as the “BRR General Guidelines for Planning and Construction of Villages”.

With respect to its implementation strategy, BRR identified a sequence of priorities for the redevelopment of Aceh and Nias which spanned its four-year mandate from 2005 to 2009. The energy is divided and devoted into 6 major aspects, the first and foremost one is the need of housing. Besides this, the other five areas are the recovery in Land; Infrastructure; Education and Health; Social Institution and Human Resource; and Business and Economy. Among those, Housing, Land, Education and Health Infrastructure are aiming at finish before the end of 2007. The associated infrastructure construction should be finished in 2008. At the same time, local government capacity building will consistently be developed and will be intensified in the last two years of BRR’s mandate until 2009 when the handover of power and responsibility to local government take place. A blueprint of steps of key areas development from BRR’s one year report (BRR April, 2006) is attached below:

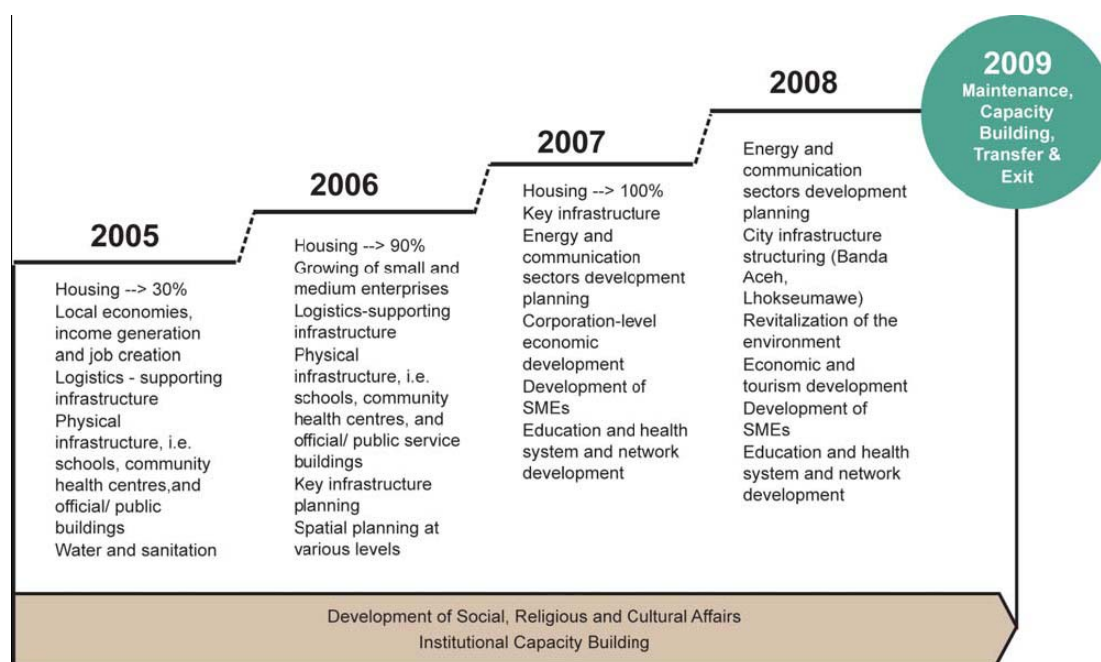


Table 5: Steps of key areas development to 2009 set out by BRR

As illustrated, the housing construction plan which is an immediate priority reaches its peak in 2006 and will be completed first set out by mid-2007, later extended to the end of the year. The past year of 2005 was mainly focused on the initial response and rescue, the main task was to provide infrastructure support for supply access, clean water and availability of sanitation facilities, tents, temporary shelters etc. After BRR was established during this stage, a program aiming at providing job opportunities to tsunami victims was conducted in Aceh based on a cash-for-work initiative. 2006 is a critical transformation stage from initial response to long term recovery, a temporary shortfall of energy in direct construction to infrastructure and support logistics development was experienced in Aceh and caused some frustrated feelings among the communities and various agencies involved in reconstruction. However, without a doubt, construction of housing is certainly on the first place of BRR's priority list, especially as the agent itself has been given the power to contract directly for the reconstruction. All the housing units are targeted to be completed in next year, as well as the reconstruction of associated physical infrastructures. BRR is expecting to finish all the matters related to the reintegration of refugees at the end of 2007 thus "a stronger sense of integration between on-the-ground activities and the implementation planning (BRR April, 2006)" could be obtained for future recovery work.

New roles and relationship model

In the new deal with BRR, CARE Indonesia is expected to draw back from current and previous headaches ranging from on-site construction problems to materials procurement when implementing its house models on both mainland and Simeulue. CII will only need to provide professional advices on management and supervision of contractors/ construction groups to the future CARE-BRR targets while BRR will take over the responsibility of identification, assessment and payment of materials suppliers and contractors using its big budget. Without a doubt, it is a good chance for CARE, BRR and involved communities, CARE could devote more

to its other important missions within the region such as livelihood, health systems and communities rebuilding when walking out from some of current dilemmas. BRR could further establish its leadership and gather more experiences in reconstruction practice at more targeted areas to better serve its country. And involved communities could receive their newly planned villages and houses to resettle their lives sooner.

But challenges are also coming: the first visualized one would be the socialization of BRR's prefabricated houses and introduction of outside contractors to joint-targeted communities. The liabilities and responsibilities of involved parties are yet to be decided while BRR is still waiting its various funding confirmations in a long bureaucratic pipeline, let alone the formation of standard conditions of contract. More thoughts should be given to what could be expected in this deal and how to prepare better for this process to add values in achieving CII's strategy or mission.

In a presentation (CARE July, 2006) given by CII at the beginning of this fieldtrip, a series of flowcharts are demonstrated to brief the future construction process according to BRR's housing and human settlement policy.

This decree clearly defined the criterion of beneficiary selection according to different conditions⁹. A list of eligible beneficiaries would be decided by involved community and village development committee (VDC) before the pre-construction process could start. In the following stage (above flowchart to the right), NGO will work closely with involved community, VDC and other consultants through a series of "on-site socializations" (or "community participations") to develop an appropriate village site plan and individual house and infrastructure designs for the examination and endorsement of BRR in order to have the building permit approved.

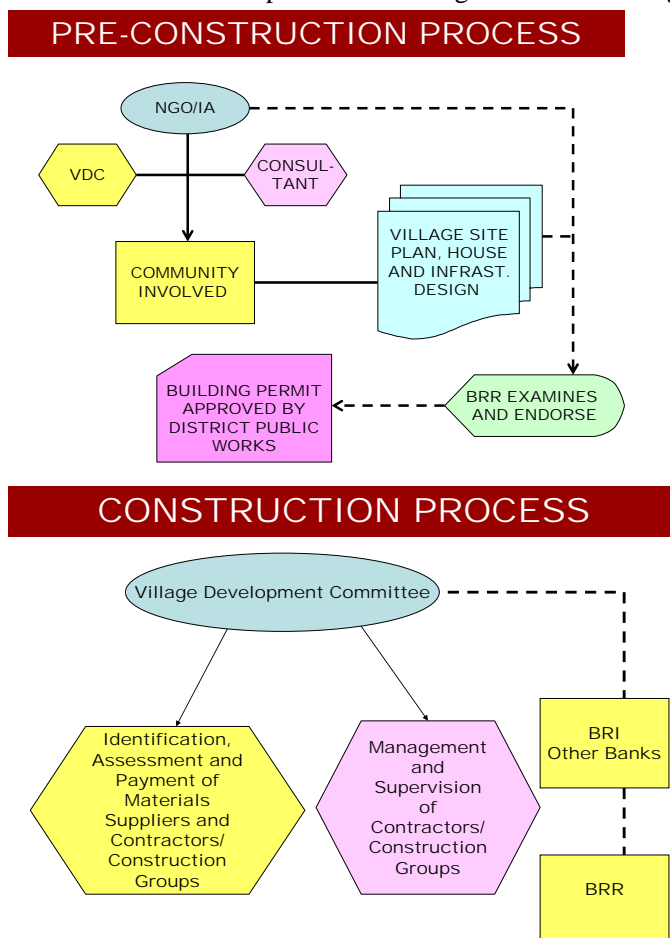


Table 6: Flowcharts given by CII illustrate future construction process with BRR involved

When all the above processes are successfully accomplished, formal construction could start. As can be seen from the flowchart, the principal in this construction process is the Village Development

⁹ Rehabilitation, reconstruction and resettlement of House Owners and Renters/ Squatters (Policy No. 18, 19 /PER/BP-BRR/III/2006 and No. 20, 21 /PER/BP-BRR/V/2006)

Committee who will have its granted budget from BRR through BRI¹⁰ or other commercial banks designated for this purpose. Unlike the previous CARE house targets, the construction budget of future BRR-CARE targets will come solely through this mechanism from BRR. The responsibility and energy of CII will then draw back from its previous role as both the principal and the contractor and concentrate to the right polygon in the flowchart as to provide suggestions and assistances to VDC on management and supervision of contractors.

If compare to the triangle relationship¹¹ in a typical construction contract, role of The Principal would be taken by BRR and VDC, where the latter could be regarded as the executive principal or the on-site representative of the funding principal BRR. The Contractor will be the construction companies contracted directly by BRR in Aceh, or more likely from outside provinces. The only place left for CII will be the role of the Engineer. As defined in various standards, the Engineer has a dual role as an expert adviser and representative of the Principal on the field, giving directions to the Contractor on behalf of the Principal, at the same time, independent of either contracting party, fairly and impartially make the decisions under the contract documents, value the work and issue certificates at due times. In the future 1218 mainland and another 1396 Simeulue CARE-BRR targets, could CII represent BRR or VDC on the field? Could CII value the work and give directions to outside contractors on behalf of BRR? These would only be possible if CARE's model houses also be implemented to joint targets in future, and those responsibilities are clearly defined not only in the contract with BRR but also in the contract between BRR and its future contractors. However, hardly any of these will be possible if BRR insist on implementing its pre-fabricated houses to the joint targets. Or someone will argue, why CII should be in any role of the triangle at all, how about only provide technical advices to the VDC and do not need to represent anyone. This again will only be possible when CARE's models are implemented, otherwise, CII's advices would be easily overlooked and the construction of joint targets will become a purely BRR-Contractor relationship.

Some trial villages using BRR budgets and CARE houses are already agreed upon, the results and experiences gained from those practices about relationships with VDC and contractors are most valuable to future decision makings. Although seems beautiful and modern to the author, BRR's pre-fabricated houses are disliked by most of locals the author met. Some thought it must be designed by someone outside Aceh because it overlooks the need of higher level of ventilation, which is a must in local humid environment and usually addressed by small square open holes on top of the normal windows in most of traditional Aceh houses. Some even called it a "coffin" due to the lack of traditional open windows and their replacement of sealed aluminum windows that would be "only appropriate for the rich who can afford an air conditioner". In Acehese traditions, the kitchen should be strictly separated from other part of house and any domestic poultry or pets. The design of semi-open kitchen in BRR's model house obviously overlooks this aspect. And the location of BRR's showcase house and windows open to the near bank of a fishing pond are criticized as a general invitation to hundreds of mosquitoes. Some comments on the uncertainty of its structural aspects are also expressed in a report (Potangaroa July 2006) to CII by Dr. Regan Potangaroa during this fieldtrip. All of above could make CII more easily to introduce CARE

¹⁰ Bank Rakyat Indonesia (BRI), a government commercial bank that began as an agricultural development bank and now as the major bank designated for BRR budget

¹¹ The Principal, the Contractor and the Engineer

house model to BRR-CARE targeted communities instead of BRR's model but relatively increase the difficulty if have to socialize BRR's idea as a potential result of future contract. Conclusions and recommendations on this part are made at the end of this report.

Other highlights

CARE's image in local media

In data collection process for this review, the author came across many local media reports about CARE Indonesia on the internet. It will be interesting to see the general image of CARE in local media, and connect this information to the impression that the author got from interviews and general discussions with local staff to see to what level the media did influence the impression of CII among local people. A pilot study of news about CII on Indonesia-Relief website will be analyzed to establish a breakdown of positive, neutral, and negative feedbacks. Similar study about BRR could also be reviewed with interests in the new contract deal.

When searching anything related to the keywords such as "Aceh reconstruction" or "Tsunami relief" on the internet, the first website came into view is the Indonesia-Relief.org, or so-called the Indonesia Tsunami relief portal. It is clearly organized and totally dedicated to the current relief work in Indonesia. Established in early March 2005, the major aim of Indonesia-Relief.org is to provide news and reports on Indonesia tsunami disaster relief, and in accordance with transition from relief to rehabilitation and reconstruction phase of Aceh and North Sumatra. The source is official but the update rate is somewhat slow. There are 15 news reports about CARE under its Foreign NGOs category, dates range from 23 March 2005 to 16 September 2005. A pilot study about these news are demonstrated below, a similar one based on it but from expanded sources on internet is also carried out.

Table 7: A pilot study about News on Indonesia-Relief website

No.	Related News	Negative			Neutral			Positive		
		-4	-3	-2	-1	0	1	2	3	4
1	Care Employees Stage Protest in Banda Raya	1								
2	Kuntoro Shocks to Hear No Barracks in Simeulue	1								
3	Care and UN-Habitat To Start Construction of Tsunami Houses							1		
4	Kuntoro Visits Cares Wooden House Project in Simeulue							1		
5	Australians Agonise on Slow Release of Tsunami Aid			1						
6	Australian Tsunami Aid Earn Million Dollars in Bank Interest		1							
7	CARE Australia Spend Half of Allocated Fund in Aceh Islands							1		
8	Again, Australian NGOs Defend Slow Distribution of Tsunami Aids		1							
9	Australian Defended The Slow Distribution of Aid in Aceh			1						
10	Islamic Relief Sets New Record With 20,000 Houses for Aceh					1				
11	CARE Receives \$85,000 of 'Sweat for Tsunami Relief'							1		
12	CARE, STC Receives \$100,000 USAID Fund for Nias Earthquake							1		
13	Foreign Relief Pouring into Nias, Some to Simeulue								1	

14	CARE Sent Relief Supplies to Simeulue through Singkil					1			
15	NGOs Unite to Improve Emergency Response Globally					1			
subtotal result				Neutral		0			
.....									

The result of above website is a perfect neutral, 0. But with more inputs from other sources and latest updates, CARE has a slightly positive result of 2. Those inputs are from related results of various major internet search engines, including negative ones such as “BRR warns it may take over unfinished contracts” on March 8 2006 Jakarta Post and definitely positive ones such as ranked first place in construction quality on Unsyiah-UN-Habitat Accountability Index on April.

BRR conducted its media image analysis in its official one year report according to 3 milestones as six months (October 2005), the anniversary of the tsunami (December 2005) and BRR’s first year (April 2006). The results are summarized below in a series of pie charts:

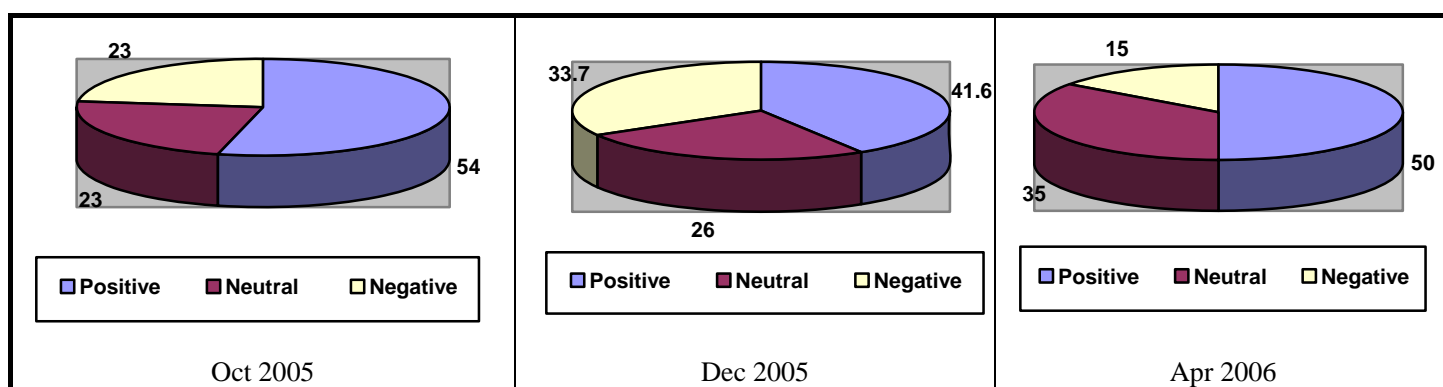


Table 8: BRR's media image from different periods (data from BRR's one year report)

It can be seen that BRR’s media image also experienced its honey moon, difficult beginning and tends to become stable as neutral or slightly positive gradually at present situation. The public perceptions toward CARE and BRR are similarly optimal above average level, which could be an advantage to the future contract in reconstruction.

Eye witness accounts of tsunami survivor survey

(by Dr. Regan Potangaroa)

Earlier research work by Dr. Regan Potangaroa has resulted in the compilation of near 404 eye witness accounts of survivors of the December 26 2004 Asian Tsunami. This was in collaboration with Cambridge University, UK and used their survey form. Of these 404 accounts, 91 were from residents in Banda Aceh with the remaining 313 accounts coming from people along the West coast of Aceh and in particular around the Calang area. As part of a Disaster Risk Reduction program with CARE, the 91 Banda Aceh eye witness accounts were analyzed by Dr. Regan assisted by the author to answer the following questions: What was their sense of the earthquake? What was their immediate response to the earthquake? When they were first aware of the tsunami and what warning did they have? Where did they

go in response to the tsunami? And how did they go? Was their first choice exit route available? The results will be highlighted with discussions; some suggestions are expected to be drawn for the evacuation and mitigation plan for CARE's target communities.

As to the sense of the earthquake, the majority of those surveyed experienced a violent or strong earthquake (80% violent 19% strong) that last around 10 minutes. In a relevant report (Wilkinson 2006) written by Red R Engineer Frank Wilkinson on coastal design and Tsunami mitigation to UNHCR, he suggests (indirectly) that a memory of possibility of tsunami occur after a violent seismic event lasts less than 60 years based on his 1941 witness of the last tsunami. Educational courses have been suggested as one option but there needs to be more such as some appropriate "memorial" to be built in permanent materials and erected in a public location to commemorate the tsunami. This needs to be discussed within each community and perhaps one significant memorial say in Banda Aceh could be an alternative to many smaller ones.

Most people ran outside (74%) with only a small percentage electing to stay inside their houses or the buildings they were in (6%). The remainder of people were already outside and moved to where others were congregating (20%). Such a response (running outside) is not surprising given that the earthquake shaking lasted for 10 minutes but emphasizes the need to ensure that the exits from the house are structurally secure. This suggests for a brick/ concrete frame house construction concrete door lintels and side columns (and preferably elimination of any brick above the doors), strong timber door frames, location of front doors away from brick walls or ensuring that if the adjacent brick wall does collapse it would not block any exit and with the exit as direct as practicable to the street. Timber verandah structures should be tied back to the main house and any existing concrete verandahs should be structurally checked.

Most of these survivors were warned by others of the pending tsunami (51%). However, 44% had no warning and were only aware of the tsunami when it arrived. The need for a primary early warning system (given the recent failure to warn people in West Java of an impending tsunami) must remain as one of the critical exercises of the Indonesian Government. Probably it needs to be decentralized to a community level warning system because of the proximity of tsunami generating earthquake faults does have credibility for Indonesia and also cut through the complicated process from top to down.

In two other countries hit by the 2004 tsunami, progress toward warning systems has been quicker. Thailand, popular with foreign tourists, has built warning towers on beaches across its southern coast to blare sirens and broadcast evacuation warnings in several languages if regional agencies issue warnings. Malaysia has positioned two buoys off its shores to give at least an hour's warning to coastal communities, and is capable of transmitting tsunami alerts by TV, radio and mobile phone text messages. Those could be good examples to be followed.

Perhaps the most interesting information is where did people go to avoid the tsunami? Most people moved on to the road (24%) followed by other family members' houses (16%) then the neighbors' house (15%), a shop or café (14%) and then the mosque (11%). Interestingly these are all horizontal evacuations and relatively smaller numbers elected for a vertical

evacuation with only 7% climbing trees and 5% climbing on to roofs. Finally it is also interesting that 66% of the survivors reported that usual route was blocked. They were able to navigate around the blockage but it is clear that exit routes will be under pressure given the other factors especially the lack of warning and that most people elected to evacuate horizontally.

Conclusions and recommendations

Conclusions and some recommendations to the problems are based on the discussions of above chapters and experiences of this fieldtrip in Banda Aceh during July. It will be generally categorized accordingly to each chapter topic.

The report began with the review of existent organisational structure of CII in order to understand the information flows involved in the procurement process. A projectized model is recognized within the housing program of CII. Several advantages and disadvantages of this model were discussed and the need to strengthen the horizontal communication and cooperation between different functional units were emphasized. It is suggested that the structure of CII should be changed from a purely projectized model to a more balanced matrix model (see appendix D) to facilitate not only the need of successful procurement, but also the smooth delivery of whole program. Some detailed measures are suggested below:

In order to encourage the cooperation between departments and shorten the communication line, a feasible measure to start with is to facilitate the personal communications between CII staffs. A new directory (different from the previous plain text one) with staff photos (both international and local) and their positions clearly illustrated in an organisational structure should be produced. Those in the critical positions of the structure should be summarized and printed out in another paper, laminated and placed near every landline telephone in CII. Detailed new directory should be easily available in both languages at every project offices and stored in shared drive of office LAN with the shortened one accessible from internet. Who is doing what should not be a question heard again in CII.

Horizontal communications at lower level in the structure are to be encouraged. There should be at least one financial staff at each project office dealing with problems on-site under the direction of PM and report them back to the financial department periodically. This is not to decentralize the power of financial unit but to facilitate the support of the main program. Similarly, procurement department should have one (one is enough) local staff designated to each project to work together with PM and construction supervisors at the beginning of every procurement. He or she does not necessarily have to have a desk in the project office but should be the contact point between the specific project team to procurement unit. Procurement manager should meet regularly and coordinate with managers of supply chain, logistic, warehouses and finance to facilitate the procurement process, this could be facilitated by program coordinator for calling procurement meetings whenever is necessary.

Construction Weekly Meeting on every Tuesday morning is a good way for horizontal

communication, but some points are worth noticing. Local staff meeting followed this is on Friday weekly, which is a little too late to react to the problems discussed on Tuesday. It is suggested that local staff meeting should be held immediately after Tuesday morning's one and responsibility and deadline to every problem should be clearly designated to individuals to come up with a solution and report back the progress in next meeting until it is solved. A draft agenda and minutes of the meeting should be sent to every participant on Monday morning and Wednesday morning respectively through email for them to follow up. A professional interpreter should present at every meeting to facilitate the bilingual process. But in order to encourage the on-site problem solving, any issue that could be more appropriate to discuss in the following local staff meeting should not be covered.

In chapter 2 regarding timber procurement problems, the procedures of international and local timber supply are reviewed followed by discussions on alternative ways of using steel trusses or coconut timber as solutions to the current problem. It is suggested that CII should seek every possible way of local timber sources with policy clarifications and transportation suggestions from BRR timber helpdesk, while explore the legal, economic and logistic feasibility of imported timber from other successful experiences. In order to facilitate the process, it is better to have an overall procurement plan for the whole project rather than the split small ones before starting any negotiation with potential vendors, which will streamline the supply in later stage and result in a good deal. More studies are required toward the use of coconut timber, but it remains an attractive potential for Simeulue Island when the policy barriers are cleaned along the way. Although expensive than timber, steel trusses could be a back up option to save all the troubles in a short time, and with large amount of order, the price could be lowered from mass production. This could be made happened with joint efforts of other organisations. Possibility of milling and use of seized timber or timber from other sources (e.g. Oxfam) should be followed up.

As the major coordinating agency in Aceh reconstruction with growing powers for contracting, BRR's initial mission setup and strategies steps were reviewed in line with its serial of guidelines on infrastructure development, village planning and housing rebuilding in the next chapter. Relationships within the new contract with BRR were discussed; the changing roles of involved parties were compared against typical relationship in a construction contract of Principal, Engineer and Contractor. It is suggested that CII should insist on implementing CARE's house model to the joint targets with BRR in the future. And responsibilities of each party should be clearly defined in an internationally recognized form of contract (such as FIDIC or NEC, etc.) with BRR and future contractors including dispute resolution clauses. If it is not the case, then it seems a total handover of unfinished joint targets to BRR for its prefabricated model would even be a better option. However, this would be the last way to go and needs to be handled very carefully. Some trial villages using BRR budgets and CARE houses models would become good examples to be followed if finished successfully, the experiences from such practice are the most valuable input for further decision making.

Some highlights about other activities in this fieldtrip were reviewed and discussed at the last chapter including the topics of media image of CARE and eye witness accounts of tsunami survivor survey for village planning and mitigation plan for targeted communities.

Acknowledgement

The author wants to thank CARE International, especially CARE Australia and CARE Indonesia, who sponsored this trip and provided enormous help in data collection for the review. My sincere thanks and gratitude due to *Dr. Suzanne Wilkinson* and *Dr. Regan Potangaroa*, my supervisors who made this trip possible, especially to Dr. Regan for his constant inspiring ideas along the trip and guidance in the development of this paper. The author also likes to express his deep thanks to the Resilient Organisation Project based in Canterbury University, New Zealand, who sponsored the PhD study into reconstruction procurement at the first place. And to those who took part in the interviews, their time and feedbacks are most appreciated.

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Appendices

Appendix A: Interviews schedules and questionnaires been used

Interviews Schedule

Interviewee(s)	Time/ Date	Questions
Frank Ssensamba Procurement Manager CARE International Indonesia	1415-1540 8 July 2006	Questionnaire 2 (attached below)
Saadah Lubis BRR Timber Helpdesk officer	0930-1000 10 July 2006	Open discussion on timber procurement and supply chain transportation
Ahmad Fauzi CARE's Project Manager in Banda Aceh	1400-1530 (recorded) 12 July 2006	Questionnaire 2
Ralph Douglass British Red Cross Indonesia Forestry Support Services Ltd. New Zealand Frank Ssensamba	0830-1145 17 July 2006	Ralph generally introduced the proposed procedure of importing timber from New Zealand for reconstruction work in Banda Aceh
Frank Ssensamba	1000-1030 24 July 2006	Questionnaire 3 (attached below)
Marthen Malo Program Manager of CARE's Beudoh housing project	1337-1457 (recorded) 24 July 2006	Questionnaire 4 (attached below)
Thomas Coyle CARE's Shelter Team Manager	0930-0955 (recorded) 26 July 2006	No1,7,8,10,13 of Questionnaire 3 and No2,8,9 of Questionnaire 4

Meetings schedule

Introduction workshop of BRR Housing and Human Settlement Policy (1 st day presentation)	6 th July 2006, attended by different country representatives of CARE International during their 2-days workshop in Banda Aceh
Flowchart of Timber procurement and transportation guideline introduction meeting (recorded)	11 th July 2006 in UNORC ¹² meeting room, attended by BRR officers, senior advisors to BRR timber policy, UNHCR ¹³ and other NGO representatives
Construction weekly meeting No1	11 th July 2006 in Beudoh office, attended by construction team, project managers, shelter team leader and overall program coordinator
Construction weekly meeting No2	18 th July 2006 in Beudoh office, discussed the options for timber procurement and several problems encountered by construction team on the site
Timber decision meeting in CARE	18 th July 2006 in Procurement office, attended by program coordinator, procurement manager, shelter team manager, further discussed the options mentioned before on weekly meeting for timber supply
Construction weekly meeting No3	25 th July 2006 in Beudoh office, attended by construction team, project managers, shelter team manager and program coordinator, discussed the problems arisen with the introduction of new BRR houses to CARE's target.
Timber decision meeting No2	25 th July 2006 in CARE procurement office, attended by Beudoh program manager, program coordinator, procurement manager, a local timber supplier from Kalimantan

¹² United Nations Office of the Recovery Coordinator

¹³ United Nations High Commission of Refugees

Questionnaire 1 ¹⁴

A. Contractual arrangements

1. What types of contract and payment mechanisms were used for reconstruction (Design & Built, A+B contract, negotiated or other approaches)?
2. How was the contract process going? (time of advertising, bid opening, award and approval of contracts)
3. What was expected of the contractor(s) during the reconstruction?
4. Which parties were working together? And how was the collaboration?

Main question: What are the differences between contractual arrangements in disaster reconstruction in comparison with the normal situation?

B. Building, environmental regulations and legislation

1. Which regulatory processes facilitate the reconstruction? and how?
2. Were there any problems with the existing legislation and regulations during the reconstruction after the disaster? If yes: What were the problems? (how were they resolved?)
3. What were the wishes and demands of the citizens involved? (Did the demands and wishes hinder the progress of reconstruction?)
4. Have the workloads and resources availability been a problem? (Where did the workloads and resources come from?)

Main question: What are the differences between the post-disaster building process and the normal building process (with focus on legislation and regulations)?

C. Funding

1. How was disaster reconstruction funded?
 - according to different types of work, public & private
 - natural disaster relief expenditure is addressed in any relevant law?
 - how did the amount of subsidy been decided?
2. Which authority was the main funding authority?
3. Were there any other authorities financially assisted the reconstruction? If yes, how (through what payment mechanisms)?
4. Was everything funded? How about the roads? What was the amount of the funding?
5. Was everything insured? If no: How much was the shortfall between insurance cover and the cost of recovery from the disaster? If too significant, how could it be available?
6. Did the community already have/ or aware they have a Mitigation/Recovery plan about reconstruction funding?

Main question: What is the difference between funding in post disaster situations, and

¹⁴ originally compiled in New Zealand for the trip, the Chinese version of a similar one was used for Yangtze River Flood case study

funding in the normal construction situation?

D. Quality

1. Was the reconstruction process efficient? (Capacity shortages/shortfalls?)
2. Was there a Quality Assurance plan available for reconstruction? To what level should the reconstruction be carried out? (upgrading of facilities to a level greater than existed before the disaster or to restore to previous levels, or only for temporary purposes then move out of potential hazard area?)
3. Was the rebuilding of roads and houses also an opportune time to prepare for a next disaster? If yes, how?

Main question: What is the difference between the quality of the reconstruction and the normal building process?

E. Time

1. What defines switch from response to recovery?
 - how long does it take approximately?
 - is there any physical or policy milestone?
 - how the procurement approach changes according to the switch?
2. How was the reconstruction process made as quick as possible? (waive laws or procedures? Fast action in advertising, bid opening, award and approval of contracts? Other ways?)
3. What were the priorities in recovery/reconstruction process? how were this pattern defined?

Main question: What is the difference between the time of reconstruction and construction in normal situations?

F. GENERAL CONCLUSION

1. Was there any specific person be appointed as Recovery Coordinator during the flood? What were the agencies/parties involved to be coordinated in the recovery? how was the process?
2. How do time/cost/quality drivers differ on reconstruction projects and to which degree the balance maintain?
3. How are construction companies mobilised to do the reconstruction work?

Questionnaire 2

revised on 8 July 2006

1. What role you think CARE is taking part in reconstruction process between involved parties such as Community Board and BRR? Contractor, engineer, client, funding authority?
2. Except CARE and other NGO's, are there any local or international contractors (construction companies) involved in the reconstruction phase? What is their market share?
3. Building legislation and funding policy: is BRR's Housing and Human Settlement Policy coming from BRR solely? Is that all the organisations including NGO's involved in reconstruction process are under this policy?
4. What are the wishes and demands of the citizens involved according to your experiences? Are they hinder the progress? How and who decided the eligibility and priority of the reconstruction? How did CARE and other NGO's choose their reconstruction targets at first place?
5. In general prospective, how is reconstruction funded? (according to different types of works: public roads, facilities, private houses)
6. Has natural disaster relief expenditure been addressed in any relevant law or mitigation plan? How did the amount of subsidy been decided?
7. Quality: is there a QA plan available? To what level is the reconstruction aiming at? Is rebuilding also an opportunity to better prepare for next disaster?
8. Time/ schedule: What defines switch from response to recovery? How long did it take? Is there any physical or policy milestone?

Questionnaire 3 (20/7/06)

1. **What are the overall organizational matrix/structure of CARE INDONESIA?**
2. What value does procurement/ design/ site construction/ site socialisation provide in achieving CARE's strategy or mission?
3. What value do vendors, BRR, other NGO's, the UN system provide?
4. Who or what are the roles of **design question proposers and solution providers**? Some of those in the chain are both proposers and providers. How are these separate roles viewed and **how does one go from a proposer to a provider**? Are there any patterns to these roles?
5. What are the **design values and strategies for each of the different sections in CARE**? How are the goals of the procurement/ design/ site construction/ site socialisation the same or different from one another? What happens with the differences? How are they handled (if at all)? How do the similarities come about? Are they by design or by accident?
6. What are the standard conditions of contracts and standard forms?
7. How does **information get around the organization**? How is the email system used and to what extent? When and why are meetings called? Who attends and are they useful? A list of all the usual meetings that occur between and in the sections of procurement/ design/ site construction and site socialisation.
8. What is the flow of information between the sections? How issues are resolved, what direction is the information and what level of feed back is occurring?
9. Are there any different CARE mission statements exist in its different sections?
10. How complex are the designs and how are they being received by procurement and by the site? **To what extent has the design resulted from community consultation and to what extent could it respond more effectively?**
11. How is **risk and liability dealt with in the contracts**? Does BRR offer advice on this? Does design identify the risks? Is there a reliance on solely material specifications?
12. How will CARE address bribes and under the table payments? How are issues of sustainability (that appears to be seen as both a risk and increasingly as a liability) dealt with both inside CARE and outside CARE (for example BRR)?
13. What are the **gaps and overlaps between the different sections** in CARE? what examples are there of supplier/vendor involvement to reduce design overlap ie. type of wood, timing of supply? Water tank event.
14. Are there examples of synergy where the whole is greater than the sum of the individual parts? Are there examples of **supply networks** (as opposed to supply chains)? Are there examples of both and what is the pattern of their development? (A supply network has the added component of familiarity between CARE and its vendors. It suggests that certain vendors are being able to develop an understanding of what CARE's issues are and are responding to resolve (or already have resolved) what maybe issues between the two organisations. A supply chain on the other hand just supplies with no feed back. An example of a network would be the rubber timber situation in question 1 and possibly Ralph Douglas from British Red Cross as a second example. These suggest some maturity of this area of procurement.)

Questionnaire 4

24/7/06 for Marthen

1. What is the overall organizational matrix/ structure of CII?
2. What are the main obstacles that you are facing now in the reconstruction process?
3. Who or what are the roles of design questions proposers and solution providers? Some of those in the chain are both proposers and providers. How are these separate roles viewed and how does one go from a proposer to a provider? Are there any patterns to these changes?
4. What is the flow of information between the sections? How does information get around the organization? How is the email system used and to what extent? When and why are the meetings called? Who attends and are they useful? What direction is the information and what level of feedback is occurring? Do you have the minutes of previous meetings?
5. According to your experiences, what are the gaps and overlaps between the different sections in CARE?

6. Site socialisation/ community consultation: what are the wishes and demands of the citizen involved according to your experiences? Are they hinder the progress? Who decide what kind of priority for the reconstruction? How did CARE and other NGOs choose the reconstruction targets at the first place?
7. In general prospective, how is reconstruction funded according to different types of works (public roads, facilities, private houses)?
8. Is natural disaster relief expenditure addressed in any relevant law/ mitigation plan? How did the amount of subsidy been decided? Could you break down the cost of a typical 52 million house as an example?
9. Is there a QA plan available for reconstruction? To what level is the reconstruction aiming at?
10. Anything else you want to add to your comments?

Appendix B: Photos of fieldtrip

(deleted from original to reduce the size)

1. Transitional Houses condition in Banda Aceh (photos provided by CII)

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2. BRR's prefabricated house model building process (photos provided by BRR)

(23 days from 14/4 – 6/5/2006)

...

3. Timber supply from New Zealand for Aceh reconstruction (photos provided by Ralph Douglass at British Red Cross)

...

4. Timber testing photos (26/07/06)

...

5. Construction site visit at CARE's targeted community at Lambaro Skep, Banda Aceh (17/07/06)

...

Appendix C: CARE's Timber Policy

& policy response to existing needs for shelter and local realities related to timber supplies

As noted above, about 70% of Aceh Province is still covered by natural tropical forests. This is the best remaining tropical forests in Indonesia and rich in biodiversity. To protect this forest, the Government of Aceh implemented a moratorium on logging in Aceh pre-Tsunami. In spite of the moratorium, there is extensive illegal logging. This is reported to be carried out by a so-called "Timber Mafia". This term is used to describe a consortium of government officials, army, police, businessmen, etc who allegedly conspire together to gain large profits from the illegal logging of the forest estate.

The Government of Aceh, as represented by the acting Governor, is reviewing this policy in light of the Tsunami and the need for timber for recovery. The acting Governor is in favour of "Green Aceh" (no logging) and supports WWF and other conservation NGO's programme promoting the use of imported timber from sustainably managed forests for reconstruction and recovery. This is also supported by the Ministry of the Environment.

These considerations are the foundation for the CARE International Indonesia's timber policy, which is as follows:

1. If feasible (legally, economically and logistically), CII will use imported timber therefore CII

will continue to explore the feasibility of using imported timber. It is preferable to have imported timber donated and shipped at donor expense. If timber is purchased on international markets, the cost should not exceed local prices. CII will continue to liaise with the government of Indonesia to clarify the legality of imported timber for Aceh.

2. On Simeulue, CII supports the milling and use of seized timber (timber cut by companies pre-tsunami, but confiscated by government). According to the Department of Forestry in Banda Aceh, the Bupati¹⁵ can proceed with the milling and sale or donation of this seized timber. Conservation NGOs also support use of this seized timber in order to take pressure off timber from natural forests. CARE has reached an agreement with the Department of Forestry/District Government on Simeulue to donate unprocessed logs to CARE while logs that have been processed already will be sold to cover costs (processing and transportation costs).

3. People on Simeulue are cutting timber from natural forests for their own housing requirements. The legality of this is still unclear. Does customary rights allow them to cut timber for own use, or does forestry law prevail? CARE is working with CIFOR and is engaging an Environmental Legal Institution in Indonesia to provide a legal review and recommendations on legality. On such issues, it is CII policy to respect the laws of Indonesia.

4. On Simeulue, prototype houses and trial village will use milled seized timber, coconut timber (in collaboration with the NGO CONCERN) or legal plantation grown timber from other provinces of Indonesia (if supplies of seized timber and coconut timber is inadequate to meet local needs).

Timber for trial villages, in Banda Aceh and Aceh Besar, will be procured from legal sources in Indonesia - plantation grown timber from other provinces of Indonesia or certified/documented timber from sustainably-managed forests. Procurement will begin immediately to ensure timber for trial villages. CARE is approaching companies that are collaborating with NGOs to improve forest management like SUMALINDO and SMARTWOOD.

6. CARE will participate in policy dialogue that is now being facilitated by FAO, and will advocate against logging concessions operated by large companies and in support of co-management of natural resources based on principles of community-based natural resources management or CBNRM. This will apply to all classes of forests - production, conservation, protection, etc. consistent with a pro-poor approach to natural resources management. This includes exploring options for pro-poor approaches to payments for environmental services initiatives, related to hydrological, biodiversity and carbon services in these forests when under sustainable CBNRM.

7. On Simeulue and in forest-dependent communities in other parts of Aceh, CBNRM initiatives will be facilitated to ensure recovery and sustainable management of community forests as part of disaster mitigation/disaster preparedness plans (having local sources of timber in villages in case of future natural disasters where timber will be required), and also for sustainable livelihoods. CARE will work with CIFOR and other partners for co-management, CBNRM, and sustainable

¹⁵ Regional Governor

livelihoods from CBNRM.

In conclusion, CARE's timber policy will be consistent with the following principles:

- Beneficiary needs are our primary concern, so CARE's timber policy should benefit them and not unduly delay or complicate reconstruction.
- CARE adheres to generally accepted international standards (SPHERE, etc.), including good environmental governance.
- Our policy is in accord with Indonesian law and will be implemented in close consultation and cooperation with GoI.
- CARE aims for a diversity of timber sources, first as a way to explore and assess various options and later as a hedge against supply disruption and other risks.

CARE ANNEXE TO ITS TIMBER POLICY

Timber Issues and CARE's Timber Policy

A joint assessment by WWF and Greenomics¹⁶ estimates that between 4 and 8 million cubic meters of sawn timber the equivalent of more than 400,000 ha of forest — will be needed for rebuilding Aceh alone. They also estimate that of this, a maximum of 10 percent can be sourced legally and sustainably from within Indonesia². A major concern is that if timber comes from natural forests in Aceh, this would result in environmental degradation, and a decline in environmental services, and consequently a greater risk of damaging floods in many watersheds.

About 70% of Aceh Province is still covered by natural tropical forests. These are the best remaining tropical forests in Indonesia, rich in biodiversity. Pre-tsunami, to protect these forests, the Government of Aceh implemented a moratorium on logging in Aceh. In spite of the moratorium, there is extensive illegal logging. Legal timber in other parts of Indonesia is not adequate to meet domestic requirements, let alone the reconstruction needs of tsunami-affected areas of Aceh province.

Notwithstanding, the Government of Aceh —after significant debate between the Ministry of the Environment, the WWF and other conservation NGOs, and the Ministry of Forestry and FAO— has ruled that timber may only be imported via government-to-government donations. CARE is thus bound to procure all of its timber within Indonesia.

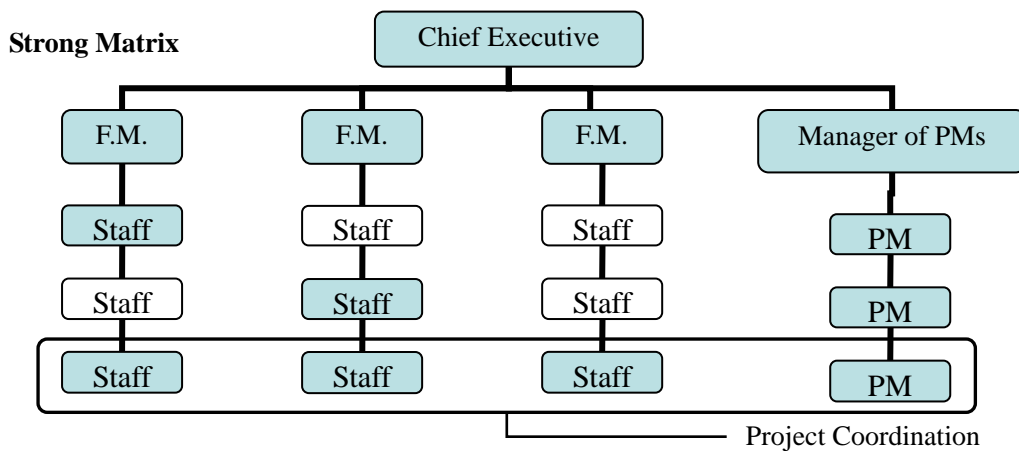
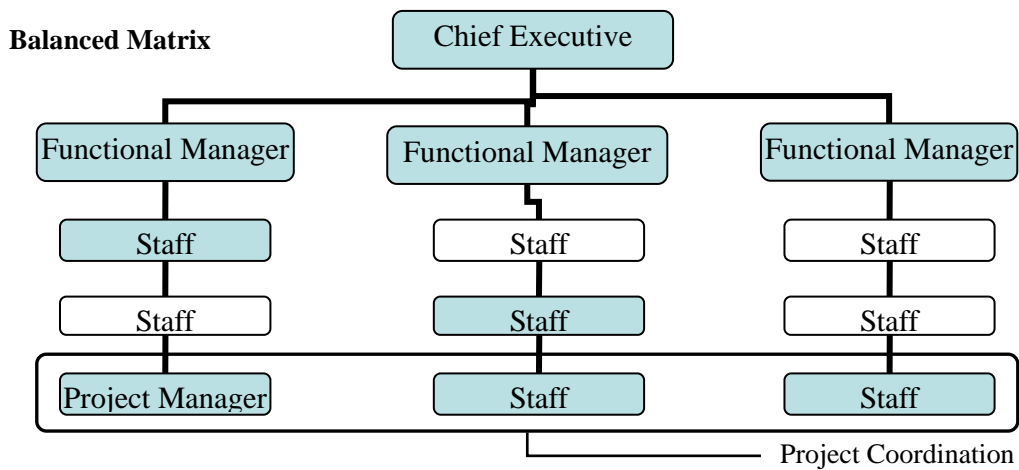
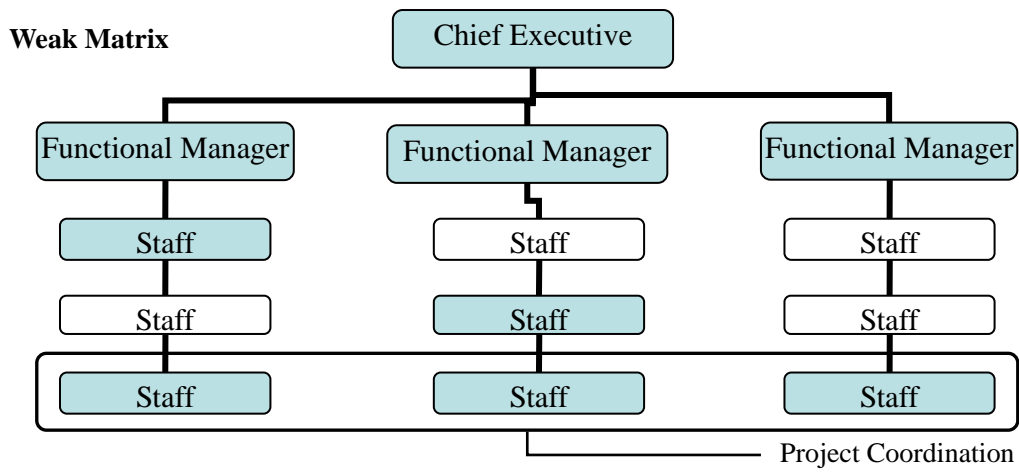
Fortunately, the lion's share of CARE's shelter programme on the mainland will target coastal communities where tsunami resistance is the major factor and cement the appropriate medium, so CARE's mainland programme will not require enormous quantities of wood. On Simeulue Island, where wood is the appropriate medium, CARE has negotiated with district government for preferential access to "seized timber" (timber illegally cut by companies pre-tsunami, but confiscated by government). To complement the seized timber on Simeulue, and on the mainland, CARE will procure its timber from cultivated sources (Acacia Magnium) from an industrial forestry site in Aceh, or it will buy sustainable harvested timber from other parts of Indonesia. Alternatively, it may negotiate with the GOT for access to imported timber.

¹⁶ Greenomics and WWF (2005). *A Preliminary Assessment of Timber Requirements for Aceh's Reconstruction, and Its Implications*. January 2005.

CARE will participate in policy dialogue that is now being facilitated by FAO, and will advocate against logging concessions operated by large companies and in support of co-management of natural resources based on principles of Community Based Natural Resource Management (CBNRM). This will apply to all classes of forests—production, conservation, protection, etc. This is part of CIT's pro-poor approach to natural resources management. This includes exploring options for pro-poor approaches to payments for environmental services initiatives related to hydrological, biodiversity and carbon services in these forests when under sustainable CBNRM.

CARE's timber policy will keep the needs and rights of the displaced front and centre and will not unduly delay or complicate reconstruction. CARE adheres to generally accepted international standards (SPHERE, etc.), including good environmental governance. CARE's policy will be in accordance with Indonesian law and will be implemented in close consultation and cooperation with the GOT. CARE will aim for a diversity of timber sources, first as a way to explore and assess various options, and later as a hedge against supply disruption and other risks.

Appendix D: Models of different Matrix Organisations



Appendix E: Terms of Reference (28/6/06)

The assignment will be to provide assistance Dr Regan Potangaroa, Consultant – Review of Structural Engineering & Construction Process in Indonesia.

The duration of the assignment will be for one month commencing on 1 July 2006 until 29 July 2006.

The tasks of the student will be as follows:

- 1) Assist the Consultant (Dr Regan Potangaroa) in completing his assignment tasks related to the Bedouh Housing Program.
- 2) Investigate as directed by the consultant and in consultation with the CARE field office in Banda Aceh the present methods and processes of procurement.
- 3) Under the direction of the consultant, specifically review the issues related to the procurement of timber for house construction with a view to providing alternatives that streamline and facilitate the construction of housing numbers set by CARE.