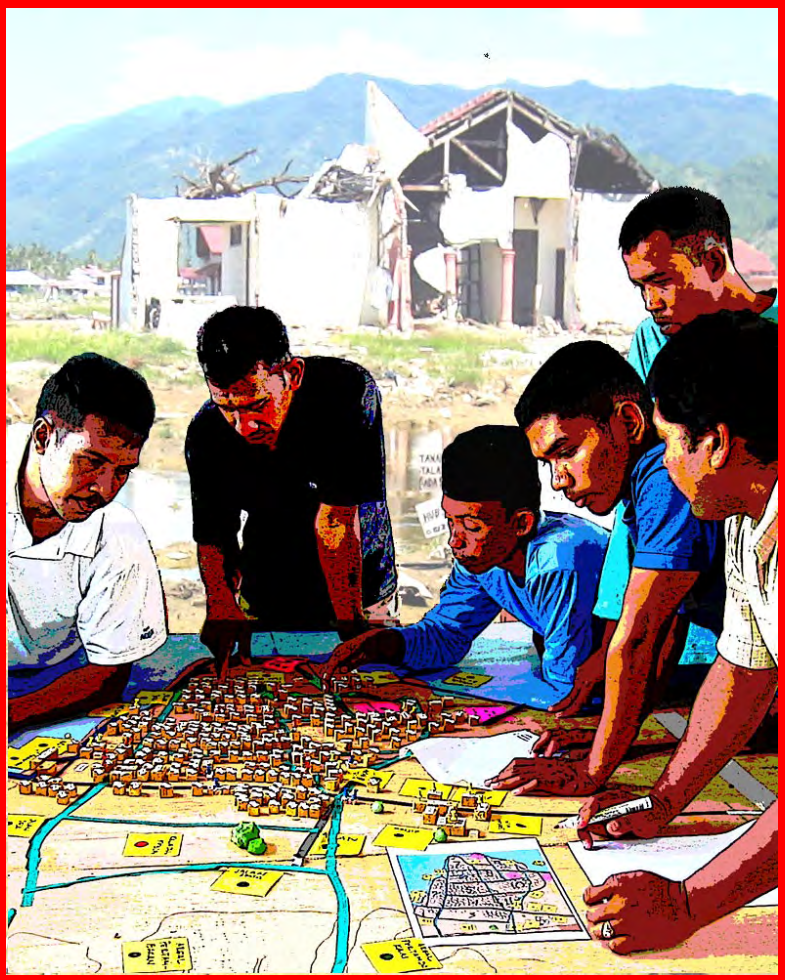
Community Action Planning for Participatory Reconstruction
of Tsunami Affected Areas in Aceh Province
June 22- July 28, 2005

Dr. Reinhard Goethert

# The Tsunami CAP Works

SUMMARY - ACTIVITIES - COMMENTARY - ISSUES - CONCERNS



Prepared for the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH

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# SUMMARY


Three pilot CAP workshops were carried out in June and July of 2005 in Banda Aceh and surrounding areas, to tackle the complex issues of rebuilding Tsunami destroyed communities. The goals were to develop an appropriate Tsunami-specific CAP methodology with an implementation program of priority projects, to establish and train a ÔCAP TeamÕ for the expansion of the workshops to other destroyed communities, and to initiate construction by linking to a KfW rebuilding project focused on reconstructing 10,000 houses. The community was considered the basic unit on which all development initiatives are keyed and which representives stability within the ever changing political and strategic framework.

The pilot workshops demonstrated the effectiveness of the approach and provided a Ôkick-startÕ mobilizing rebuilding. The villages ranged from a small fishing village on the East Coast, a fishing community on the outskirts of Banda Aceh, and a large-inner city community in Banda Aceh itself. The three sites offered a variety of challenges, and a variety of approaches was tested, along with a broad range of planning strategies.

A strength of the Tsunami CAP is the direct link between CAP and implemenation donors, but this link is also a concern, particularly because of their different mandates. Continuity in staff during the transition from CAP to implementation is critical. A mechanism to publicize needs is needed to broaden and maintain rebuilding momentum. Focusing on rebuilding new houses is not enough, and long-term technical assistance and support for the re-establishment of vital social networks can have an immediate benefit as well as providing long-term development assistance.

The structure and goals of the 3 pilot CAP workshops were heavily influenced by the generally slow rebuilding situation, 7 months after the Tsunami wracked havoc on December 26. Assistance had been offered by reportedly more than 222 international NGOs, more than 150 national NGOs, 18 UN agencies, and an untold number of bilateral agencies. A GTZ/KfW team had already carried out a rapid appraisal mission in February/March 2005, commendably quick in assessing possible responses to the Tsunami.

Surviving families have long been rehoused in barracks or had made their own arrangements. Many assessments and studies have been undertaken and some say they have reached a saturation level. However, a sense of urgency by the various NGOs and funders was not apparent. In one of the pilot communities, reportedly 22 community forums, meetings, and surveys had already occurred before the CAP workshop.

The widespread publicity, the large number of NGOs and other donors, and immense, almost immediate outpouring of aid had raised expectations to a very high level among the communities for rapid rebuilding. Actual dwelling reconstruction throughout Banda Aceh was not perceived as extensive, and seems largely carried out by smaller NGOs scattered throughout the areas. Surprisingly, some NGOs were still in a Ôrelief modeÕ with semi-permanent house construction.

The first CAP workshops took place from 29 June to 1 July. Families entered the CAP with high expectations - perhaps unrealizable - and not surprisingly a sense of urgency in rebuilding houses dominated.



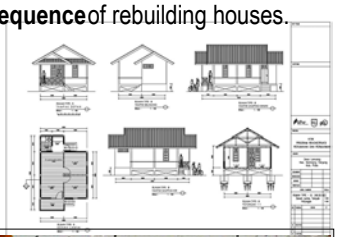
*The CAP workshops were developed and tested by Dr. Reinhard Goethert and Lalu Suhayatman Hadi together with the CAP Team Zamharira, Baiq Faerusz Ziba, Silvera Umeza, Ramadhona, Stephanus Hery Kuntarto, with Zul Fadli, Saefullah, Mutia, Tri Wahuyni; and KfW liaison led by Georg Fiebig, with Sigit, Endah Raharjo and assistants.*

# WHAT DO YOU HAVE AFTER THE WORKSHOP?

Difficult policy decisions are made by the community with technical consultation.
Rebuilding is focused and facilitated for both community and donor.

## ■ HOUSING

¥An **inventory** of the houses and the facilities showing owner and condition.
¥An **image and standard of houses** to be reconstructed.
¥ **Criteria and sequence** of rebuilding houses.


## ■ PLANNING

¥A **spatial plan** of the village in model form, showing damaged areas, relative housing location within a Ôgood enough accuracyÕ street framework, public facilities, and open areas.

¥A **concept plan for escape routes** and other mitigation measures.

## ■ PRIORITIES AND ALTERNATIVES

¥A **prioritized list** of facilities to be reconstructed or repaired.
¥ **Alternatives and strategies for rebuilding priorities** which consider a range of inputs, from community to outside assistance.


## ■ DOCUMENTATION AND ORGANIZATION

¥A **Binder** of the community goals and priorities to guide and record rebuilding.


¥An **organizational structure** to manage the process of reconstruction.
¥An **English Summary** to facilitate donor assistance.

## ■ TRANSITION TO IMPLEMENTATION

¥ **Property corners reestablished** on the site to clarify vulnerable areas and planned escape routes.


## ■ A COMMUNITY STRENGTHENED

¥A **reinforcement of the community and leadership** structure, rebuilding a sense of control, direction and hope.

**AND NOW READY TO WORK WITH THOSE OFFERING HELP!**

# ACTIVITIES

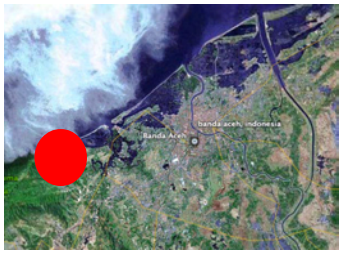
The Pilot Villages Đ There Pilot Tsunami CAPs Đ Site Model ĐThe Workshop Đ Spatial Planning Đ Housing Đ Documentation

## The PILOT VILLAGES

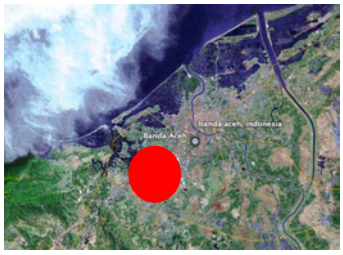
The three pilot workshops represented a variety of site conditions with a large variation in available background information. This diversity provided a broad range of challenges from which to develop and to test CAP methodologies, and was effective preparation for large-scale CAP implementation throughout the Banda Aceh region.

■ LANCANG VILLAGE, Pidie, is a fishing village on an island with only one central street -spine for access and escape. Most of the houses were destroyed.


■ LAMTEUNGOH and neighboring LAMTUTUI VILLAGES are located on the outskirts of Banda Aceh, on a peninsula with mountains on one side affording a ready escape destination. The village was completely destroyed with heavy loss of life.



■ LAM TEUMAN TIMUR VILLAGE is near the center of Banda Aceh, an area mixed in income, housing types and degree of destruction - and with it different challenges of rebuilding. It is 10 times larger than Lancang Village in Pidie.



## THREE ÔTSUNAMIÕ CAPS

The focus of the CAP workshops was the community. The community was seen as a constant, stable element within the frequent shifts and often conflicting policies, and the variable interests of agencies and aid groups.

The workshops met in the few remaining public buildings in each village. Approximately 50-60 participants attended each of the workshops, with participations carefully selected to include representatives from all sectors, with special attention to women representatives.

The workshop was focused around small group work to explore options, with presentation and discussion with the full community to reach consensus on issues. A moderator guided the sessions, and the working groups were assisted by facilitators to provide additional resources and assist the discussion.

Charts filled out by the small groups were used extensively to capture ideas and to use as a transparent presentation reference. All charts and models were photographed, reduced, and place in a binder as the workshop record. Copies of the binder are intended for the community, the GTZ, the KfW, Bappenas, and the district headÕ office.

### ■ LANCANG VILLAGE


*Central meeting place in refugee barracks was workshop site.*

### ■ LAM TUTUI AND LAM TEUNGOH VILLAGES

*Mosque being repaired was workshop location.*

### ■ LAM TEMEN TIMUR VILLAGE

*Recently cleared elementary school was site for workshop.*



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## SITE MODEL

A vital element of the CAP process is a large model of the site, which accommodates several goals:
¥ facilitates visualization and understanding of the situation in each village.
¥ records physical elements of the village: houses, streets, public facilities, and destroyed and damaged areas as identified by the community. This is essentially an instant community mapping (GIS) exercise.
¥ serves as a driver for the workshop discussions.

The base varied according to community size, and to a maximum dimension of approximately 3 m. The larger the model the easier it was for the community to visualize their village. The scale varied from 1/500 to 1/1000, with the larger size more useful and recommended for future CAPs.

The model was build to be deliberately crude when viewed from the eyes of a professional. The model was intended to be a working tool and not a finished representation. Being crude - but not inaccurate - encouraged the community to explore alternatives without concern for destroying the integrity of the model.

The model base included road alignments and general physical boundaries, and was built by the project team in preparation for the workshop. The base was precise, with dimensions taken either through careful field measurement or from satellite imagery (Ikonos). The method used varied according to availability: Lancang on the east coast in Pidie required a field survey since the Ikonos imagery took several weeks to procure. Lamteungoh and Lamtutui villages on the outskirts of Banda Aceh in Aceh Besar used a low-grade Ikonos image as base, sufficient for general boundaries (water line), and an indication of the previous streets. Surprising the quality was bad, explained by the image suppliers as a result of atmospheric conditions. For Lam Teuman Timur village in the district of Jaya Baru, Banda Aceh, a high-quality Ikonos image was secured which was redrawn with AutoCad to provide a detailed accurate base.

No attempt was made to include houses or their ÔfootprintÕ, since this was left for the individual families to locate as part of the workshop. The families used precut wooden blocks as their houses and located them on the model before and during the workshop. On their house they indicated degree of destruction (natural = OK; red = damaged; black = destroyed) and their name.

Collectively, the community identified public buildings and their degree of destruction, and areas damaged by the tsunami, for example Ôeroded areasÕ.

After the model was completed with the basic information - streets, houses, public facilities, damaged areas - it was used throughout the workshop to explore replanning options.

Model Base
Streets, rivers, other major elements are shown


Model Completed
Families add their houses, labeling with name and degree of destruction (natural, red, black coloring).
Community indicates damage using red, and public facilities/public interventions in yellow.
Blue/green tape indicates escape routes.
Kiosks and ÔrelaxÕ were also identified.

## THE WORKSHOP

Rapid, focused sessions with the community and other representatives was used to inventory rebuilding needs, agree on strategies and priorities for rebuilding, and to determine an immediate implementation program for housing as catalyst for a rebuilding program. Priority was given to community initiatives, with professionals only in a limited supporting role.

### Task 1: REMEMBERING - GOOD AND BAD

***"What do you want to pass on to your children? What do you want them to experience, what memories do you want them to carry into the future?***
***First, what are the good things that you want them to experience? And secondly, what are the things that could now be improved, the things that were not so good."***

The goal is to bring the community together by reflecting on what was important in the past, as a basis for thinking about the rebuilding program and priorities. Physical things - buildings, parks, etc. - as well as events and social activities were suggested.

| What do you remember that was good? + | What do you remember that was not so good? Things that need improvement? − |
|---|---|
| • | • |
| • | • |
| • | • |
| • | • |

*A Vision Statement is prepared from the Ôgood memoriesÕ.*

*A Problems list is summarized from the Ôbad memoriesÕ.*

**Summary of Problems**

- 
- 
- 
- 

**Our VISION - Lam Tutui**
"A strong welcoming community centered around fishing and harbor, favoring the beach, sports and trees. A mosque as the focus, and houses with gardens and courtyards."

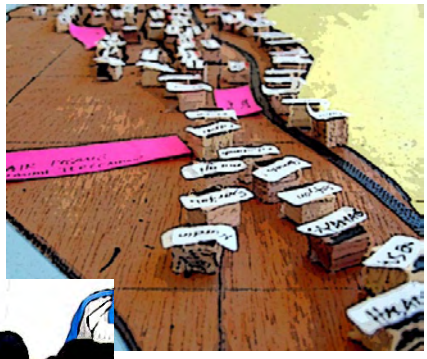
**Our VISION - Lam Temen Timur**
"A mixed life-style community between modern and traditional culture, with high mobility in expectations, where accessibility and public facilities are important: community center, green areas, with good streets and drainage. Good houses are for everyone."

**Our VISION - Lancang**
"A green village with trees and good roads, with the mosque as the community activity center. There is a place for the fishermen to work, a place for the kids to play, clean water facilities that covers all the community needs, and a decent house to live, surrounded by fish ponds and mangrove trees."


**But before the workshop gets started, children sketch their vision of what the village would look like when it is rebuilt.**
The sketches are displayed as part of the workshop and provide another perspective for thinking about priorities. The children will be the village in the future, and it is important for them to already contribute and feel a part of the process.

## Task 2: INVENTORYING THE SITUATION

***"Locate your house and the public facilities on the model and indicate whether OK, damaged, or destroyed. Also on the model, identify damaged areas of the village. "***



The goal is to locate every house, all the public facilities, and the site conditions on the model, along with the name and the degree of damage, to give a spatial perspective of the village situation.

The information is summarized in a ÔVillage InventoryÕ chart according to category. The inventory is useful for an overall perspective of the village situation.

| VILLAGE INVENTORY | Status ● ◒ ○ |
|---|---|
| Public Facilities | |
| • | |
| • | |
| • | |
| • | |
| Infrastructure | |
| • | |
| • | |
| • | |
| • | |
| Site | |
| • | |
| • | |
| • | |

A second chart gathers the problems from the previous ÔRemembersÕ task together with new problems identified from the model. The chart is a combination of the former problems from ÔRememberingÕ and ÔnewÕ problems arising from the Tsunami destruction as identified on the model.

| PROBLEMS |
|---|
| (From Remembering Task 1) |
| • |
| • |
| • |
| • |
| (From Model) |
| • |
| • |
| • |

A ÔSummary of ProblemsÕ chart is useful to group problems under main categories - for example, ÔinfrastructureÕ, ÔpublicfacilitiesÕ in anticipation of exploring how to overcome the problems by small working groups. Note that additional special subgroups may be helpful to address special situations.

*Regroup into categories to facilitate thinking about how to overcome problems.*

| SUMMARY of PROBLEMS |
|---|
| Public Facilities |
| Infrastructure |
| |
| |

***HOMEWORK!***

Ask for volunteers to count all the houses on the model and summarize their condition. This is a good check to see if the number matches with official lists and ito make sure no one has been forgotten.

## Task 3: PRIORITIZING REBUILDING

***"Take each of the problems from the Summary chart and the Village Inventory chart and decide which are urgent and should be done Now, and which could be done at a Later time and do not have a sense of urgency. Think about the relative cost, and group them as relatively Low cost, High cost, and those that fall in the Middle."***

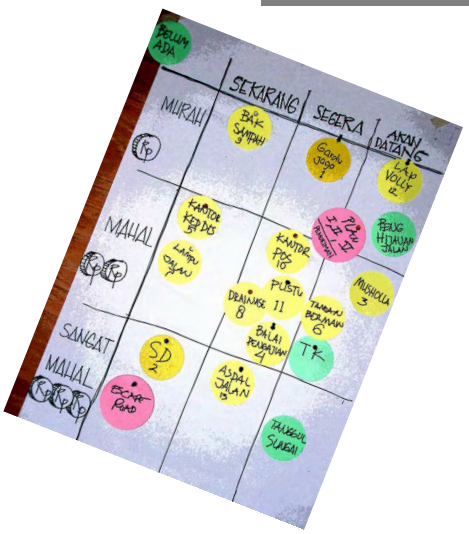
This chart gives a quick understanding of the values that the community places on the various components to be rebuilt. This priorities are decided by the small working groups within each category, which is then presented and discussed. Relative cost may be more problematic to determine since there are different solutions possible.

SUMMARY OF PROBLEMS

| RELATIVE COSTS | Now | Soon | Later |
|---|---|---|---|
| Rp | | | |
| Rp Rp | | | |
| Rp Rp Rp | | | |

VILLAGE INVENTORY
Facilitaties - Infrastructure - Site

| RELATIVE COSTS | Now | Soon | Later |
|---|---|---|---|
| Rp | | | |
| Rp Rp | | | |
| Rp Rp Rp | | | |




## Task 4: EXPLORING WAYS OF REBUILDING

ALTERNATIVE APPROACHES

| RELATIVE COSTS | Can do | Need some help | Cannot do |
|---|---|---|---|
| Rp | | | |
| Rp Rp | | | |
| Rp Rp Rp | | | |

***"Take the priority components in the 'Now' column from Task 3 and explore different ways to rebuild considering different ways that the community can be involved: <u>self-build</u>, <u>with some help</u>, or if too difficult and/or costly, <u>needs to be done by others</u>."***

***"After the chart has been filled and presented, determine the priority of all the ways of rebuilding, indicate with N (now), S (soon), and L (later)."***

The goal is to broaden the ways to think about rebuilding and to bring out the possibilities of more community involvement. Building up dependency on outsiders is to be discouraged.

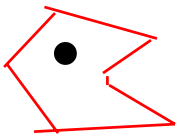
## Task 5: STARTING PROJECTS - CATALYSTS

***Where to start with reconstruction?***

***"Help potential donors by outlining possible projects, what you think needs to be done, how can the village help, and where it could be located."***

To facilitate the participation of donors, selected priority projects are detailed. These summary outlines of possible projects facilitates informed choice by the donors. Each of the categories should select at least one project to be detailed. Projects are presented category by category, to allow and encourage smaller donors to participate. This does not preclude large donors from complete across-the-board rebuilding efforts.

For EACH ITEM (Ex: Repair road - prepared for each priority item in Task 4)

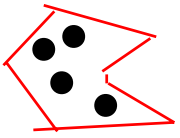
| What could be done? | What are the main tasks? | What can we offer to help? | Where is it located in the village? |
|---|---|---|---|
| | | |  |

***Where to start with houses?***

***"Where do we start rebuilding houses? First consider how you would decide, ask what criteria would reflect the consensus of the community. Then, use the criteria in determined which specific houses are built first, second, etc. It may be useful to group houses into groups of 5-10 to anticipate how the construction would proceed since you cannot build all at once. Indicate the locations on the model."***

***"Think about these other issues:***
***- Where can houses not be rebuilt because of damages to the site? This could be areas where it is now flooded and the land has been washed away, or barriers have been destroyed.***
***- Where is land that families could move if they cannot go back to their original places? Does the village own land that could be used?***
***- What to do in situations where many family members are missing?"***

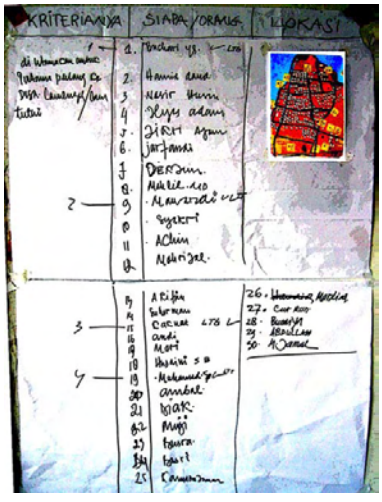
HOUSING - Who and where to start?

| Criteria for selection | Name of family | Where located in the village |
|---|---|---|
| • • • • | • • • • |  |

The all important and difficult decision on where to start rebuilding housing was a key input of the community. Surprisingly the communities were able to quickly determine criteria and select families - a task that outside professionals would have grappled with for months. This politically-charged process proved to be more as a regular task of the workshop despite our initial reservations.

In one of the villages the village head and a small group of leaders took the initiative in deciding which houses, using the model as their reference with the whole community clustered around. This transparency in decision-making was carefully followed by the community.

It is important for the community to review the selections with regard to the site situation. The model serves well to determine if the houses fall within Ôescape routesÕ or in other no-build areas.



## SPECIAL TASKS FOR HOUSING

***"Consider how the house should be constructed. What materials should be used? And think about how to build your house better and safer - what would you do to be safer in Tsunamis, flooding, and earthquakes."***

The goal is to improve the construction of the houses and build awareness of standards which result in safer construction. By asking how they would address the potential disasters, it offers the opportunity to discuss various alternative construction measures.

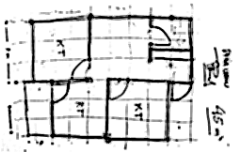
The facilitator has a particularly important role in these tasks: he must bring in safety issues and offer suggestions on how the house could be better constructed. He must remind families of the costs involved and suggest tradeoffs when appropriate.

In the pilot workshops, the houses were elevated to mitigate damage from seasonal flooding, and a 3m x 3m grid of reinforced concrete was encouraged as a safety measure.

HOW SHOULD THE HOUSE BE BUILD?

| What materials to use? | How address safety concerns? |
|---|---|
| Roof:<br>Walls:<br>Flooring: | From earthquakes:<br>From flooding:<br>From Tsunami: |

WHAT SHOULD THE HOUSE LOOK LIKE?

| Sketch | Plan |
|---|---|
|  |  |

***"Sketch how you envision the house to be rebuilt. What is the arrangement of the rooms, and what would it look like?"***

The goal is to determine the standard of expectations in plan, materials and size, and most importantly, what is the Ôimageõ of the house. A model - out of cardboard? - may be used effectively for families to visualize the house.

From the pilot workshops, the families expressed their biggest concern for the size of the house and the image.

## SPECIAL PLANNING TASK FOR LARGER VILLAGES

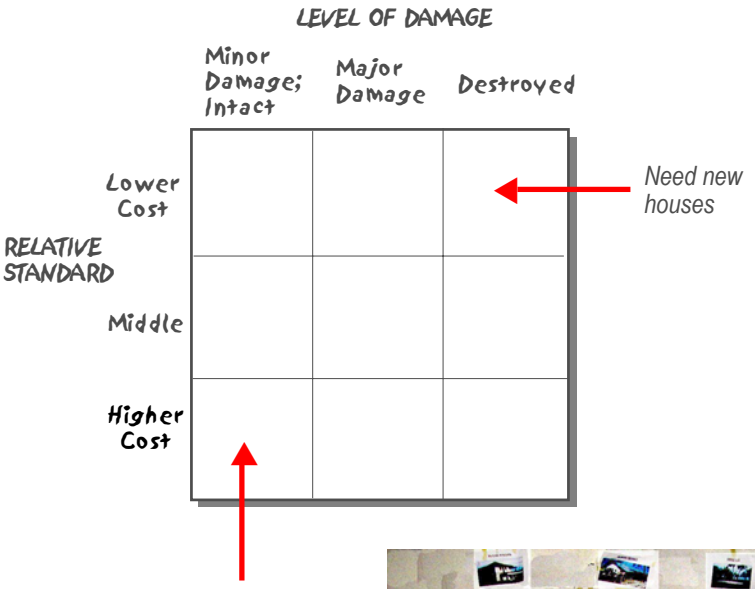
***"In your village there is a wide range of houses from relatively small to big, and there are various ranges of damage, some completely destroyed and some only damaged a little. Each family has a different situation, and the community should explore strategies in dealing with the different cases.***
***Think about different strategies that make sense considering the different family circumstances.***
***It may be useful to think about policies on technical assistance, material support, financial support, and even construction of a new house."***

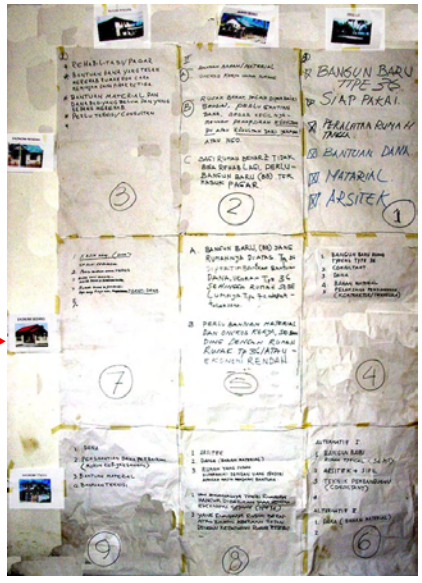
***"And secondly, which are the most important strategies that need to be implemented now. Rank each box in order of importance."***

Damage has been simplified into three levels: minor damage where the family can still live in the house, major damage in which the family can no longer live, and destroyed where nothing is left to repair.

The types of houses are grouped into three categories: obviously houses belonging to wealthy families, more standard houses with assumed average income, and small houses with families assumed to have lower incomes.

*A large matrix was constructed on the floor to make it easy for everyone to participate, to facilitate adding information, and to let everyone follow what is happening.*




*Photos make clear the Relative Standard and the Level of Damage*

| | | |
|---|---|---|
| 3 | 2 | 1 |
| 7 | 5 | 4 |
| 9 | 8 | 6 |

*Priorities as decided by one of the communities. Note unusual decision on Ô6Õ and Ô7Õ.*

## Task 6: ORGANIZING THE VILLAGE

***"Decide on the main categories that include all your projects. Agree on who will represent the community in discussions with donors."***

COMMUNITY ORGANIZATION CHART

| Development Committees | Committee Members | Donor counterpart |
|---|---|---|
| 'VDC' Village Development Committee | • Village Head<br>• Heads of each committee | |
| Housing | • | |
| Infrastructure | • | |
| Public Facilities | • | |
| Streets | | |
| GTZ Liaison<br>KfW Liaison | | |

*These blocks are filled in by donors as they indicate their interest in assisting in this area.*

The forming of committees for each of the key categories offers some assurance that their points of view will be taken in consideration during reconstruction. A ÔVillage Development CommitteeÕ composed of the headman and heads of each of the committees provides overall guidance and coordination. These agreed committees provide a stable, consistent contact for donors, facilitating the process of rebuilding.

Special sessions would be useful in helping communities understand and deal with donors.

## THE CLOSING

The ending of the workshop is very important in formalizing the agreements. It is also a time of celebration, and an important milestone in the process of reconstruction.
It should be a formal and serious event with officials from government and donors attending and speaking. It should involve all of the community and not just the workshop participants - including the children!

The closing ceremony is a time for validation and acceptance of the workshop results. Having EVERYONE sign a large sheet with the community vision is a good way to show support for the workshop, and provides a formal record of the event.

In some of the pilot workshops, a seedling was presented to each family, symbolizing the growing of tree to parallel the growing of the house.


*And a customized T-shirt for the whole community to commemorate the start of rebuilding!*

## SPATIAL PLANNING

The village model provided the base to explore replanning initiatives with particular concern for disaster mitigation. The physical elements are located on the model and the status determined (intact, damaged, destroyed); escape routes were considered; a site assessment of damages was made (buildable as is; needs some site work to be used; requires replanning before development)

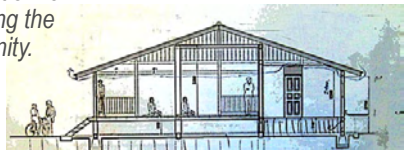
Spatial planning focused on:
¥Addressing safety concerns in the community.
¥ Rapid re-establishment of a sense of identify and focus of the community

Safety concerns at the village scale primarily involved designating Ôescape routesÕ These routes generally required 1) realignment of streets, widened to accommodate anticipated use during an emergency, and 2) identification of properties impending the routes and requiring resettlement elsewhere, ideally in or near the existing community. Damaged areas where resettlement would be ill-advised or require special reconstruction efforts - for example, severely eroded sections requiring fill - were identified and strategies discussed.

*Escape routes became an important planning goal. In some areas adjacent hills provide ready safety.*

A second planning goal was rebuilding and reinforcing the sense of community through consolidation of rebuilding elements. Construction of a multi-purpose central meeting place (ÔbaileÕ) was a quick highly visible action, requiring agreement on location preferably on community-held land. A second key strategy was to reconstruct the initial houses clustered in a central location, augmented by repair and repaving of streets, installation or repair of drainage, and reestablishing trees and other markers. All the measures are directed toward reestablishing a physical presence. In villages where few or no houses remained, this becomes a very important factor and the absence of houses facilitates the process by allowing maximum freedom in selecting which to rebuild first.

*A baile was a quick intervention for rebuilding the community.*



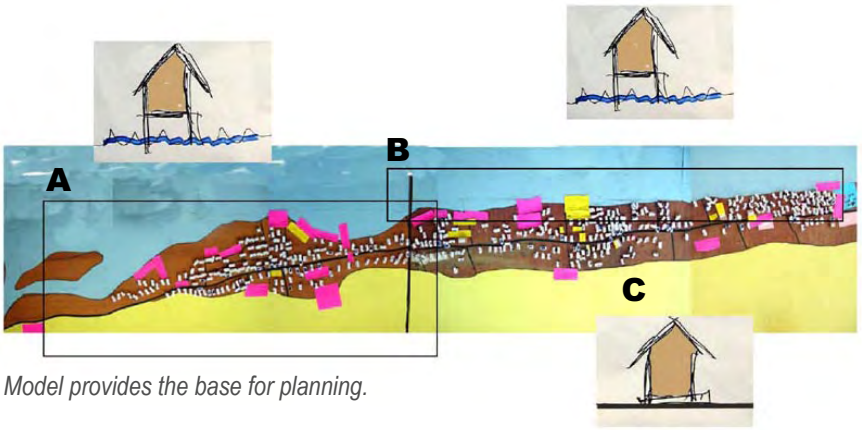
*The consolidation of rebuilding elements is a seed for the rebirth of the community.*

The model provided the base for the community to study options of redevelopment. Tape, colored paper, pins, etc. were used to rapidly visualize and test different alternatives. The model of the community provided sufficient accuracy to define the general location of envisioned changes and impacts.

An underlying hierarchy of reconstruction was considered to reinforce the re-establishment of the community. Repairing and rebuilding roads quickly as a framework for reconstruction was a key concern. The roads define public/ private realms, and provide structure for the community Repairing/building a place for community to meet was considered vital to re-establish a place of identity, and to recreate an address. A mosque or Baile serve these functions well.

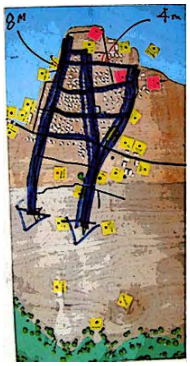
## ■ LANCANG VILLAGE, Pidie

Three areas were identified with different environmental situations.
A: Areas flooding from Tsunami;
B: Seasonal flooding approximately 50cm twice a year; and
C: Generally dry with no flooding.
For areas ÔAÕ and ÔBÕ, houses shou be elevated; for area ÔCÕ, the houses could be build on the ground.

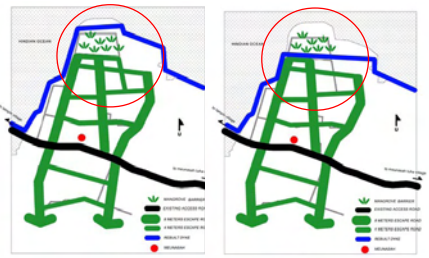



*Model provides the base for planning.*

## ■ LAMTEUNGOH and neighboring LAMTUTUI VILLAGES

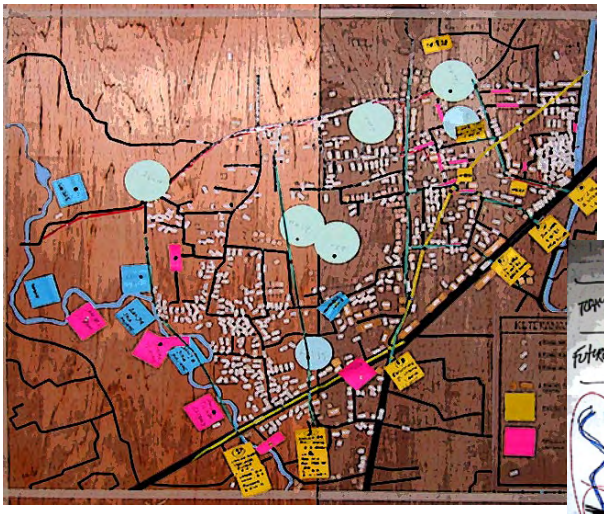


Escape routes were the key planning elements considered, around which the rebuilding would be organized. Two sizes were identified: two 8-meter main routes to the hills, and 4-meter cross routes feeding into the two main routes.



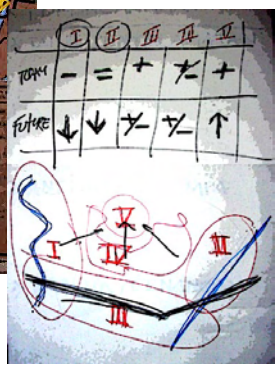
Newly created low level areas were identified, and considerations for rebuilding dikes were explored.

## ■ LAM TEMEN TIMUR VILLAGE



Several escape routes were identified, leading into the main through street.

Five planning areas were identified from the model with distinctive characteristics, and requiring different approaches in rebuilding and planning for future development.




I - High density, 1-2 story houses, saturated developed; requires upgrading.
II - Very high density, tightly packed houses, saturated development; requires upgrading.
III -Commercial strip development, 2-4 stories, relatively higher value land; provides services to community, limited in future expansion.
IV - Rice patties, with potential to absorb future expansion; requires structure plan and development strategy.
V - Vacant land, can accommodate future expansion; requires structure plan and development strategy

**TRANSITION TO IMPLEMENTATION:**
***STAKING THE CORNERS OF THE FAMILY PLOTS***

In situations where the village has been heavily destroyed, the re-establishment of the properties by staking out the corner points of each property is an effective transition to implementation. Several purposes are achieved:
- it re-establishes the physical presence of the village
- it maintains the momentum toward implementation.
- it clarifies immediately the areas of the village that can and cannot be built on.
- it makes clear to affected families the impact of the expansion and routing of streets and paths for escape routes, and guides the adjustment of the properties to accommodate the increased width.

A team consisting of 3-4 persons from the community who are familiar with surveying, or are engaged in this field, is an effective mechanism for staking the properties. This provides employment and infuses income directly into the community.

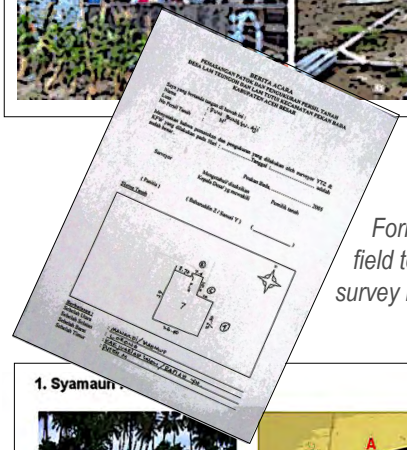
Families from abutting properties should identify and agree on corner locations. The stakes are placed, and distances measured. The conditions of the property should be noted. A simple 1-page form may be used to record the information: name of family, abutting families, a sketch plan of the property with measurements and notes.

Drawing a plan of the village with the measurements from the ground provide an effective frame for reconstruction. Although the information may not have the accuracy of professional surveyors, it is Ôgood enoughÕ and satisfactory to the villagers. Moreover this approach is quick, a powerful advantage in allowing a quicker start in rebuilding and avoiding delays waiting for overcommitted professionals.

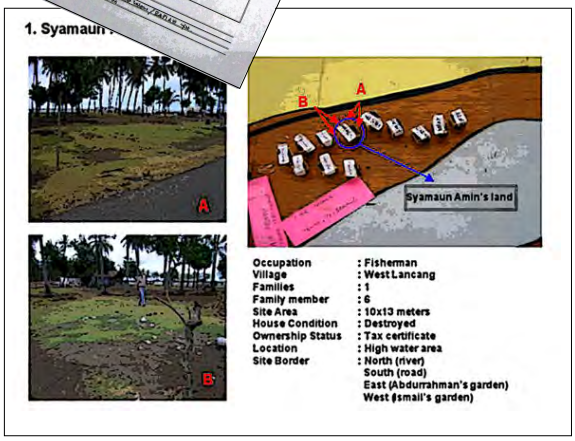
Once the corners have been marked, it may be an opportunity for the village to consider adjusting property sizes, shapes, and locations. Villages would need to set criteria for appropriate sizes, acceptable by all to assure smooth adjustment and maintain community harmony. It also provides a frame for considering relocation of public facilities, and shows the impact of various alternatives.

Stakes should be suitable of pounding into the ground without breaking, and long enough to be relatively stable and difficult to move.

*First four plots located and staked in Lamteungoh and Lamtutui villages*

*Form used in the field to document the survey information.*




*Detailed information sheet prepared for each family during staking out of first 24 plots in Pidie.*

## HOUSING

Housing was a key concern of the villagers. The long delay since the Tsunami made reestablishing their community and rebuilding their houses a top priority.
The design was a partnership effort between the families and the architects. Floor area and a reassuring familiar image was the concern of the families, and safety and flooding protection were key concerns of the architects.

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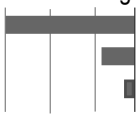
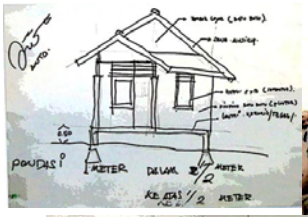
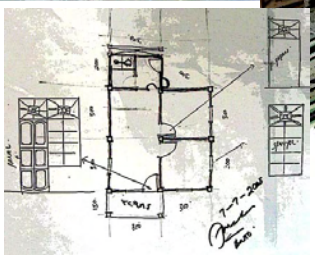
■ LANCANG Village

Status of Housing



| | | |
|---|---|---|
| Destroyed | 283 | 75% |
| Damaged | 75 | 20% |
| Intact | 21 | 5% |
| TOTAL | 379 | 100% |





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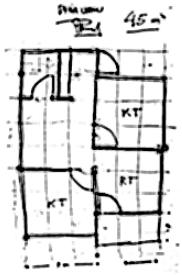
■ LAM TUTUI and LAM TEUNGOH Villages

Status of Housing

| | | |
|---|---|---|
| Destroyed | 164* | 100% |
| Damaged Ð | Ð | |
| Intact | Ð | Ð |
| TOTAL | 164 | 100% |

**Lam Tutui - 55; Lam Teungoh - 109*



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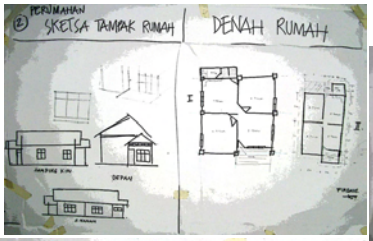
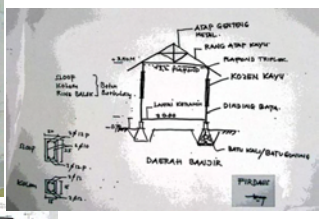
■ LAM TEMEN TIMUR Village

Status of Housing

| | | |
|---|---|---|
| Destroyed | 2,040 | 54% |
| Damaged | 1,007 | 27% |
| Intact | 746 | 19% |
| TOTAL | 3,793 | 100% |

*Note: Lam Temen Timur has 10 times the number of houses as in Lancang, with a large percentage of houses needing repair.*



## DOCUMENTATION

The workshop was documented to preserve the discussions and agreements, and to guide funders in framing and implementing their contributions. It provides a reference base and starting point for future further development by other funders.

All of the workshop material - model and charts - was photographed and saved in digital format. The material was stored in two ways:
1 - Print form. All the charts from the workshop exercises were reduced, printed on A4 format, and collected in a binder. Photographic images of the model were also included, both before the planning exercises and after.
2 - Digital storage. All the material was also stored on a CD, and included with the binder. The information on the CD is collected in its original form (Photoshop, Word, PowerPoint, etc.) and in an Acrobat conversion to avoid dependence on specific programs.

The binder was organized into two sections, targeting different purposes:
1 - Reduced prints of all workshop charts and materials. The Ôraw Õcharts photographed directly from the workshop provided a record of the proceedings. These are intended to facilitate future rethinking and adjustment, and as a base for future continuation.
2 - English summary. A summary of the key points targeting potential funders is added at the beginning. Included is a quick 1-page overview, the agreements reached on housing, the organization of the community listing contacts for specific sectors (ex: school, clinic, water supply, etc.) and special items specific to the village. It is prepared in English to reach a wider group of funders.

Copies of the binder were distributed as follows: The original binder remains in the village, and a copy would be available to the district, Bappenas, and GTZ/KfW.

As the community rebuilds and as future development initiatives occur, the binder could continue to serve as a depository of information, both as history and as guide for future support from NGOs or other funders. Photographs of the community and the families would further enrich the binder and truly make it a working history of the village.

The model also remains with the community. It offers an opportunity for the community to keep track of the rebuilding and to reflect on development alternatives.

Example of pages from the Lam Tutui Binder

# COMMENTARY

- **The *'Tsunami* CAP*'* Process is Effective in Rebuilding**
- **The Ô*Tsunami* CAPÕ Builds on the ÔstandardÕ CAP Process**
- **Direct Link to Implementation a Key Advantage**
- **Pilot Communities Well-chosen to Develop Process**
- **CAP Restores Authority and Balance to Communities**
- **CAP Links to Other On-going Programs**
- **Facilitators are important for effective information dissemination**

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**The *'Tsunami* CAP*'* Process is Effective in Rebuilding**

The rapid nature inherent in the process matched the expectations of the communities, and provided the catalyst to Ôkick-startÕ the process. It starts with the premise that communities should be the proper guardians for community decisons and they have the capacity to do so. It respects and reinforces community ownership through this Ôequal partnerÕ approach. The CAP approach links community mapping, prioritization, preliminary planning and design, and organization. It goes beyond community mapping and includes the difficult policy decisions that are best left to the community.

CAP broke the perceived growing complacency by the agencies and the survey/study/research cycles. It effectively re-energized and refocused on rebuilding activities, acting as a catalyst in the process.

**The Ô*Tsunami* CAPÓ Builds on the*'standard'* CAP Process**

A key difference is the emphasis on speed in assessment of what is needed and setting up reconstruction efforts, and linking priorities with an implementation programming. A ÔstandardÕ CAP is focused toward identifying problems and programming ways to improve circumstances for a longer term development agenda.

The outcome is focused on spatial rebuilding, while in a ÔstandardÕ more customary CAP, process is emphasized and a broader spectrum of issues is entertained with a longer development horizon. Transparency and decision-making with a broad range of stakeholders features in both.

The format is the same: focused workshop with full range of community members, rapid 2-3 day event, a model as base to visualize and collect issues, small groups tackle issues and present to the community using charts as the device for focusing inputs, and guidance by a moderator assisted by facilitators. A similar sequence is followed by both CAPs: problem identification, priority establishment, solution determination, and Ônext stepsÕ with responsibilities and actions. In the Ô*Tsunami* CAPÕ additional modules are added but maintaining the general style and framework: *Remembering* (reflecting on what is important in rebuilding, preparation of a vision), *Inventory* (what is there, what is the status), *Spatial Planning* (opportunities for improvement), *Development Agenda* (program of priority items, focused around housing reconstruction and resettlement of families) and *Dealing with Outsiders* (how to relate to NGOs, other potential funders, and dealing with technical assistance in a constructive, pro-action stance).

**Direct Link to Implementation a Key Advantage**

The credibility and the power of the *Tsunami* CAP is the promise and immediate follow-through of implementation. The rapid CAP process sets the tone and rhythm of Ôkick-startingÕ the rebuilding process, but vital are immediate tangible outcomes which must follow.

Housing was articulated as the clear priority of the communities, and commencement of construction was applauded and brought credibility in the pilot projects.

Linking the two agencies, the GTZ with its CAP background, and the KfW with its construction mandate, has the potential of a powerful mechanism for rebuilding. Expected uncertainties in determining the shared responsibilities when linking GTZ and KfW may be problematic and assumed to be able to overcome.

**Pilot Communities Well-chosen to Develop Process**

The three areas selected covered a wide range of issues that would confront future CAPS. and allowed effective preparation in anticipation. A broad range of issues, from relatively simple rebuilding to complex rebuilding and repair were sucessfully confronted, which provide good models for future CAPs.

The available information varied considerably before the start of the CAPs, from little to no information, to detailed social and physical surveys. Very little information was available for the Lancang Village, with no social surveys and no physical mapping. Lam Temem Timur had relatively complete social surveys and detailed physical maps. Despite the lack of information in some villages, this did not adversely affect the outcome of the CAPs, and this is not seen as a barrrier to to future CAPs.

**The CAP Revitalizes and Restores Balance Toward Communities**

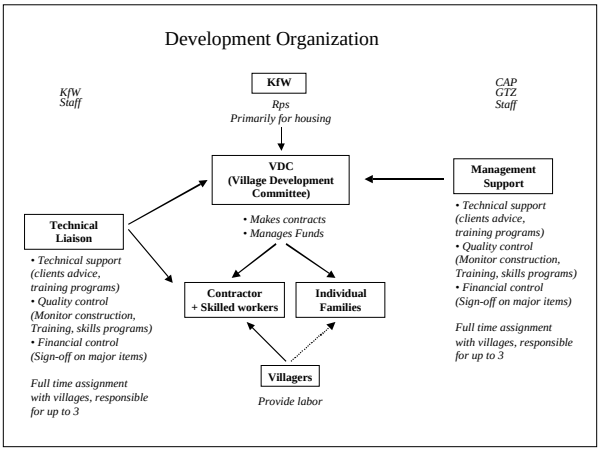
The community is strengthened through the CAP process, and gives them more confidence in addressing their issues. Their direct involvement in deciding on priorities and determining

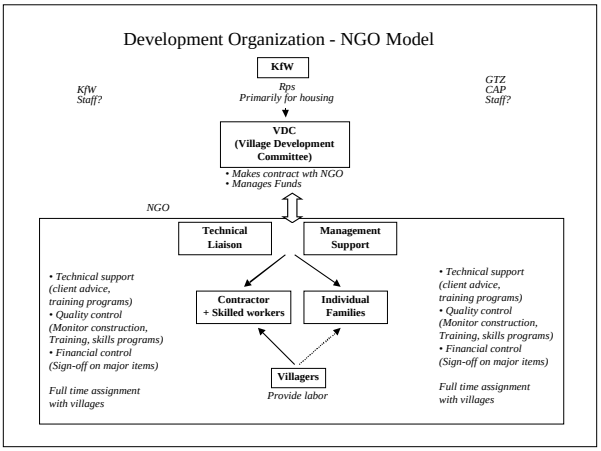
implementation strategies empowers the community. A passive, Ôwaiting for helpÕ stance is avoided, replaced by a Ôwe can doÕ optimism. It helps reestablish the fragile social networks of the community.

Their dependence on outside policy decision which may or may not be applicable and which may or may not be funded in a timely manner, was lessened. Essentially, the communities take the lead and drive the agenda, which opens the possibility for them to market their needs to many funders, and to explore internal ways of reconstruction. This is an advantage to both community and outsider support: for the community it clearly identifies their specific needs and priorities, and for the outsider support agencies it clearly indicates where support is needed, eliminating difficult policy determination and avoids irrelevant projects and programs.

A Village Development Committee (VDC) was established when no there was no existing organization. Generally this paralleled and overlapped with an existing structure. Two liaisons were considered for each village: one from the GTZ CAP Team, who would continue to provide support to the community, and one from KfW who would liaison with the implementing agency.

Tighter links with the local government and the planning commission should be encouraged. The current shortage of staff and overwhelming responsibilities of the government precluded effective operational links and support in the pilot workshops.




**CAP Links to Other On-going Programs**

CAP embraces the CDD model (Community-Driven Development) and offers a way to put these principles into practice.

CAP effectively builds on other programs that are engaged with communities. For example, the extensive and successful Ôcommunity-mappingÕ efforts from several agencies provided an ideal starting point for the CAP workshops when available. The previous work is not wasted but facilitates the CAP process, and provides more detailed information for the implementation phase after the CAP.

However, the upfront Ômust-haveÕ information for the CAP workshop to function is minimal. Information sufficient for the model base with boundaries, main land features, main streets is necessary. Other information including number of houses, tenure of properties, status of damage and other physical data is derived in the workshop, but if available the workshop provides a check with reality as noted by the villagers.

**Facilitators are important for effective information dissemination**

Generally there were six for each workshop, who work with the small working groups in focusing and articulating their ideas. They are the front-line, key resource in bringing in technical expertise and experience. For example, they can discuss ways of strengthening buildings for earthquake and flooding mitigation as learned in other contexts.

They can be engaged for only the workshop ot on-call as needed, or could have dual responsibilities including setting up and implementing CAPs. Critical is that the facilitators do not dominant the small working groups, but remain as resource persons who are ready to assist as needed.

**¥ Organizational Issues Considered Transitory During Pilot Phase**
**¥After the CAPs - What happens to the Team with its Expertise?**
**¥ CAPs Are Never the Same**
**¥ Community and Professional Are Partners and Have Different Roles**
**¥ Limits to CAP Approach**
**¥Plan/build As-you-go Strategy** vs **Detailed Overall Planning**
**¥ CAP Bias Toward Communities, Not Policies and Programs**
**¥Community Contracting Important**
**¥Is CAP Needed?**

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**Organizational and Staffing Issues Considered Transitory During Pilot Phase**

Three issues persisted throughout the pilot phase: staffing of the CAP Team, clarity of organizational structure (ÒWhich agency is the boss? Where are the funds coming from?Ó with sudden shifts at awkward and inopportune times), and establishment of a coordination/interface protocol among the different agency partners. All of these issues were assumed to be handled during a Ôcatch-upÕ phase, where only a few CAPs were programmed. During this phase the goal was to train new staff and to test and cement procedures in preparation for full-fledged ÔCAP-factoryÕ production. More importantly, the August phase allowed the critical funding and organizational definition to be finalized.

Skilled local experienced personnel had already been contracted by the many competing agencies engaged in rebuilding since the start of reconstruction. Agencies quickest to respond to the Tsunami had contracted local expertise for up to one-year periods upon their arrival in January and February. The skilled among the flood of willing outsiders had also been quickly hired. Staff from other cities throughout Indonesia partially filled the need for staff, but brought with them attendant language and culture difficulties. Advanced ÔstudentsÕ (the term ÔstudentsÕ may better be characterized as ÔyoungprofessionalsÕ) proved to be excellent in learning the new CAP approach, were eager and energetic in their work, and lacked customary ÔbaggageÕ which facilitated team formation and learning skills - the issue became one of how to convince them to postpone their graduation and remain with the Team! Foreign volunteers generally lacked language skills which was almost essential for effective contribution. There may be more staff available after the bulk of the initial efforts are ending by the relief-oriented agencies. This may be an opportunity to tap experience professionals who already are conversant to development and local issues.

**After the CAPs - What happens to the Team with its Expertise?**

Is it feasible to consider that the CAPs would reach an end with everything accomplished? The longer term involvement in rebuilding may require maintaining staff in support to the Village Development Communities. At the minimum, it may be useful to maintain some of the CAP team to continue their liaison with the communities, since by then they will have developed a rapport of confidence and experience that would be difficult to reestablish.

The CAP Team would be a proven asset: one assumes that it would be experienced and effective in the process. It may be useful to explore how the team may be further utilized, perhaps in fundamental development issues particularly in upgrading of non-Tsunami affected communities throughout the Aceh region. The many years of conflict have had adverse affects on the region, and it may be explored how to redirect funds to broader redevelopment goals, using the CAP Team as one of the key development catalysts.

**CAPs Are Never the Same**

An effective CAP is not a static process, but dynamic and flexible to adjust to varied situations confronted.

Communities vary by sizes, site characteristics, degree of destruction, income levels, and thus the challenge mix is different. CAPs respond to these differences by modifying the basic core process. There is no one fixed set of tasks, and each CAP is a mix of options tailored to the specific community situation.

CAP moderators personalize Ôtheir ÕCAP for effective delivery, which adds additional variation to the CAP process. Not surprisingly, each CAP workshop takes on an individual character and tends to be varied and different, but all are still in the CAP spirit with similar outcome of prioritized program of rebuilding.

The burden is on the CAP moderator to make a judgement as to what is appropriate and what is needed for each community. The expertise and responsibility of the CAP moderator is critical to the success of a CAP.

**Community and Professional Are Partners and Have Different Roles**

Community Action Planning is synonymous with Ôparticipation,Õ and the active, full involvement of the community members is basic to the process. But participation does not mean capitulation to desires of the community; it does not imply that

a community has complete, unchallenged decision authority. The professional provides inputs that are equally valid but from an outside perspective. The community perspective is vital for experiential, local knowledge while the professional brings in technical as well as experiences from elsewhere. In essence, the CAP process balances the two perspectives. If there is a bias it should be towards the community, since they are ultimately left with the results.

Architects must learn ways of effectively working with communities without dominating. The workshops are not vehicles for architects to pronounce their creative constructs, but are honest forums for exchange of ideas in design. Again, if there is an imbalance, it should be on the side of the community.

In the pilot CAPs, the valid criteria of rebuilding the first series of houses as established by the community, but was tempered by the need to quickly establish identify and focus to the community as suggested by outside facilitators. This could be achieved by grouping houses and consolidating around a central element, usually a main street, but was not implemented in the CAPs because of funding constraints.

**Limits to the CAP Approach?**

*Tsunami* CAPS are inherently short and focused, and not intended for long, more deliberate planning exercises. The *Tsunami* CAPÕs a demonstrated successful process to mobilize both communities and donors, and to rapidly focus issues, take priority decisions and Ôkick-startÕ the rebuilding process in a transparent manner. Time is factor, and the rapid 2-3 day sessions are vital to the success. This rapid process knowingly precludes longer-term deliberate reflection and planning.

The emphasis on documentation and production of a Ôcommunity binderÕ captures the discussions and does allow review and revision at a later date. Revisions could take place in smaller working groups, with presentation and discussion with the whole community as part of a regular planning meetings as the community rebuilds.

Because of the rapid nature, CAP cannot address all issues, and limits must be established. Policy decisions - what to do and when - are most appropriate for a CAP since they require community consensus; for example: Where to start reconstruction? What criteria to use when deciding to rebuild? Where to place escape routes with the invariable adjustment of abutting properties?

CAP is also an effective way to disseminate information quickly to the whole community. But information is not provided as an end in itself, but only to assist communities in reaching decisions.

CAP cannot address fundamental underlying structural issues beyond the domain of a community. For example, it is not conceivable to suggest an appropriate organizational structure for the government, but could only indicate that ways that the services are best received.

The basic interactive workshop methodology could transfer well in other uses. However, it would need to be carefully framed to match expected outcome with the appropriate participants.

**Plan/build As-you-go Strategy** vs **Detailed Overall Planning**

A strategy of rapid identification and identification of the rebuilding of an initial group houses was adopted in the pilot CAPS. A more measured and deliberate comprehensive planning approach was considered neither desirable nor credible in the context of the seven-month gap between the Tsunami and the CAP, the increasing pressure by other donors, and the expectations by the communities. In part, the decision to start with houses paralleled the very limited funds available during the pilot phase. Rebuilding of houses demonstrated credibility and built confidence of the community in the CAP process and the CAP Team.

This approach carried risks, and influenced decisions on rebuilding. The initial group of houses were limited to ÔsafeÕ areas: primarily areas that are not in high-risk locations (damaged areas from the Tsunami, flooded areas) or locations liable to escape-route adjustments. However, the houses were self-selected by the community following criteria they established. The opportunity of adjusting property sizes and relocation of properties to more technically-appropriate sites was not considered, and beyond the scope of the CAP resources.

The small number of initial houses construction made the risk acceptable, but postponed the more complex issues of balancing property sizes (if considered desirable), realignment and rationalization of properties, modification of land uses, and realignment of the roads themselves. Other site reconstruction elements normally built initially were deferred. For example, the vital road system which provides a frame for rebuilding, property realignment, utility infrastructure and facilitates access for construction could potentially be compromised.

In short, the CAP locked in - but in a very small way - the future rebuilding, and the selection and positioning of the initial houses became the critical decision in the physical rebuilding.

**CAP Bias Toward Communities, Not Policies and Programs**

The workshops deliberately focused on the community as the starting basis. The strategy of Ôbottom-upÕ planning prevailed, with the goal of determining the ÔrealÕ issues (i.e., as perceived by the community) at the ÔgrassrootsÕ. The identified priorities that resulted provided a vehicle to seek assistance which has direct, immediate benefit as perceived by the community.

The continuing flux in policies and guidelines, the continuing debate and discussion of rebuilding strategy, the lack of information for detailed planning, and the slow and difficult process of developing effective government capacity,

suggests the community as one of few constant elements and essentially an island of stability within the disorder of the rebuilding programs. Accordingly, the CAP program was structured to be largely self-referenced, with a clear goal of defining areas that need support from the community perspective. The community was considered to be the driver for defining necessary government support and offered a community input in formulating appropriate policy and support programs.

A strong case could be made that organizing CAP workshops much earlier on would have been particularly vital in setting government priorities in rebuilding programs.

**Community Contracting Important**

ÔCommunityContractingÕ proved to be very useful and should be continued and strengthened.

As became clear in the pilot workshops, members of the community had a variety of skills that could be tapped for construction and to undertake the other tasks necessary to start implementation.

This may cause difficulties with donor contractual requirements for a number of bidders on construction. Perhaps additional ÔpointsÕ could be given to community-based organizations to encourage outside contractors to pair local partners. In all cases contracts should specify that a large percentage of the workers should be drawn from the community.

Community contracting is an effective way to generate needed employment and provide an income source for the families. It parallels the broader goal of rebuilding the economy of the village which is not just limited to rebuilding the destroyed and damaged houses and facilities.

Labor is never free. Requiring Ôfree effortÕ by a community deprives families from other employment.

**Is a CAP needed?**

The Tsunami CAP has been a clear catalyst in Ôkick-startingÕ the rebuilding efforts. Would a CAP still be useful if the various development agencies had been more effective and timely in their efforts?

The active involvement of the community allows quick decisions on difficult issues by the affected families: what to do first, what is the priority?

A CAP helps rebuild the confidence of a community, which remains once outside assistance is ended, and addresses a broad development purpose. Merely building and repairing is not sufficient to regain the vital social networks.

A CAP helps assert the control of the community, as a counterbalance to technocratic decisions and inputs.

## CONCERNS

**Linking CAP with implementation was the strength but also a concern Ð Continuity in staffing is important in the transition from CAP to implementation Ð Needs of the community should be disseminated to the broader world of donors Ð Targeting only select villages raises the issue of Ôneighbor-envyÕ Ð Rebuilding new is vital but not enough.**

**Linking CAP with implementation is the strength but also a concern.** The fear of ÔforgetingÕ the CAP process and Ôget on with rebuildingÕ is a strong temptation in the implementation phase.

A Ôdeep pocketÕ donor with a full range of capacities and resources could rebuild the village quickly and more thoroughly. For the village this is an immediate gain, but with a high risk of being Ôover-runÕ and loss of control, and confronted with the dilemma of settling for something different or demanding what was agreed but with the potential of losing support.

The unequal power relationship makes this particularly difficult to achieve. The basic question of Òwho decides the model of the villageÓ tends toward the technocratic, quicker solution, all too frequently overpowering the community.

**Continuity in staffing is important in the transition from CAP to implementation.**
Staff from both donors should maintain their presence in both phases to assure continuity and adherence with agreements reached in the CAP. And very important, the trust built up during the CAP provides a ready platform for facilitating implementation.

The practice of contracting staff for relatively short periods and the divergent goals of staff who are answerable to different agencies makes transitional staffing a problematic issue.

**Needs of the community should be disseminated to the broader world of donors.**
A single donor limited to only the houses may result in an abrupt end to rebuilding the village and the community when the houses are completed. Small donor resources may be too little and rebuilding becomes limited and incomplete. A large donor promotes a dependency relationship and raises expectations that cannot be maintained in the long-term. It both cases it is advantageous to broaden the support base, despite potentially less effective community management.

A medium of interface needs to be found where communities can list their needs, and donors can match their interests, skills and contributions. This would be particularly useful for the many smaller donors globally who wish to help but are limited by their means and organization to take on large tasks, and limited by their awareness of local needs. The ÔSummaryÕ in English prepared by each of the communities could be effectively used to announce the needs to the broader development community.

The place of interchange may take several forms with both global and local reach. A web-based network has instant global reach, and linking directly to umbrella NGO and donor sites facilitates access. Use of a ÔwikiÕ model may offer a low-effort model were both donor and community could list needs and contributions. Who would maintain the site? They would need to act as the go-between among the communities and donors, in updating the information, and in raising awareness. They would facilitate the initial contacts. A central-clearinghouse of locally based donors may be the first step. In both cases control remains with the communities, in that they can choose among potential donors.

**Targeting only select villages raises the issue of Ôneighbor-envyÕ.**
Two villages side by side, one rebuilt to a high standard, one still with rudimentary shelters or only limited rebuilding is an unavoidable result. What are the consequences? Are there ways to spread the rebuilding effort more uniformly?

Framing the rebuilding program to include natural groupings of several communities may mitigate the impact of the disparity of investment. For example, in the Lam Tutui and Lam Teungoh villages, the broader arc of villages around the ocean front would be a natural grouping.

**Rebuilding new is vital but not enough.**
Technical assistance and reconstruction support is equally important, and even moreso in the long term. Not all communities are completely destroyed, and many areas have a large percentage of damaged houses as in Jala Baru.

A case-by-case assessment of damages and repair options for the families is needed, and support programs offering financial assistance and rebuilding support need to be established.

The repair/technical assistance can be developed into an continuing long-term development program, which continues to assist families in expansion and upgrading of their houses. Both in the Tsunami affected areas, as well as throughout the city, upgrading is a vital need which transcends the immediate reconstruction program and suggests a long-term development program.