

Challenge for Delivering Technologies to Communities in Aceh Reconstruction Project



22nd November, 2006

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On 26 December 2004 an earthquake occurred Aceh. After the earthquake, A Tsunami wave struck Aceh. This natural disaster killed some 132,000 people with 37,000 still missing.

After One year



After One Year, the rehabilitation and reconstruction program the progress is clearly visible.



BRR:Badan Rehabilitasi dan Rekonstruksi NAD-Nias (Agency for the Rehabilitation and Reconstruction of Aceh-Nias)

Housing and Settlements

Policy

- Rebuilding or renovating all houses destroyed by tsunami in accordance to **minimum standards**, both in terms of size(**36sqm**)
- Maximizing the process of building houses to ensure that the number of houses built fulfils the needs, and that by **the end of 2006 there should be no individuals living in tents**.

Strategy

- To guarantee that assistance for housing complies with the local requirements of the communities receiving the assistance and that BRR's strategy on housing assistance is based on an agreement with the community.

Housing project



Various international organizations, Government and NGOs are working on housing project in emergency phase to development phase.

MDF CSRRP



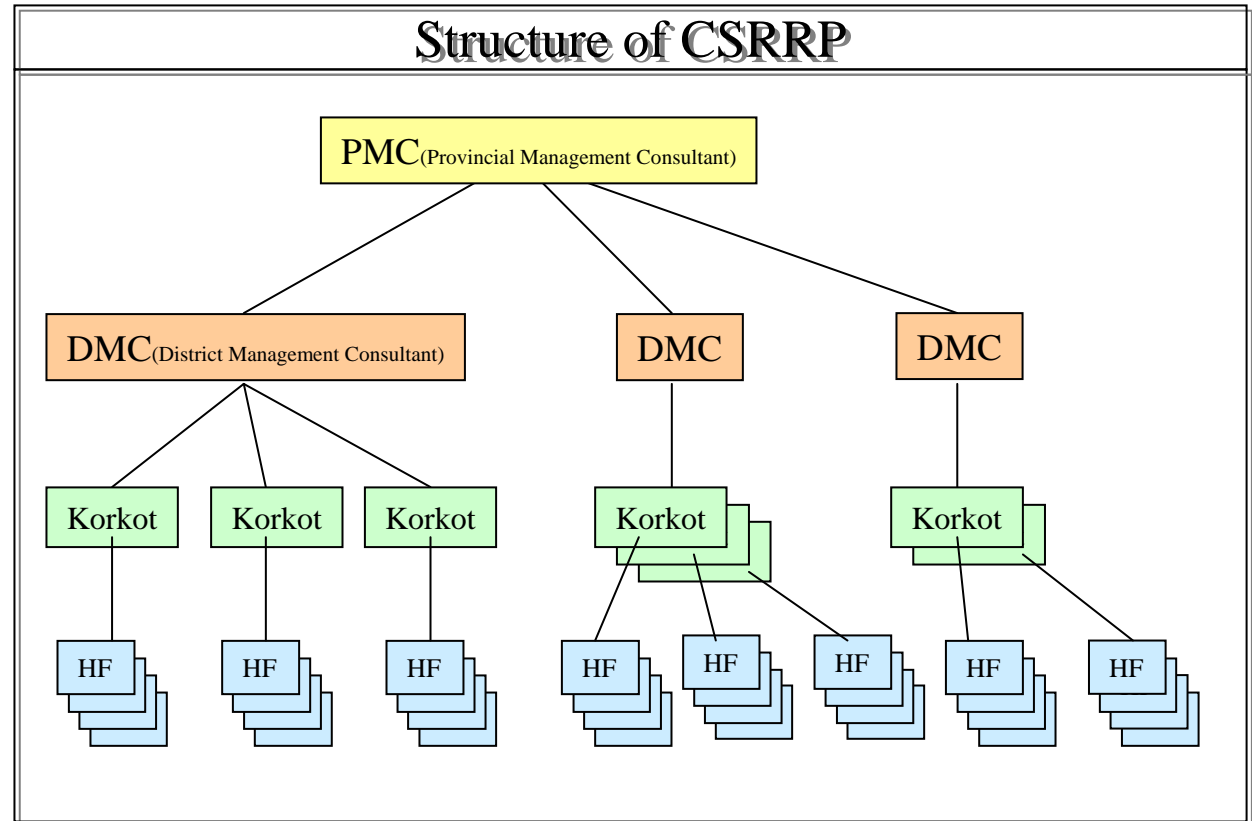
Community-Based

Settlement

Rehabilitation and

Reconstruction

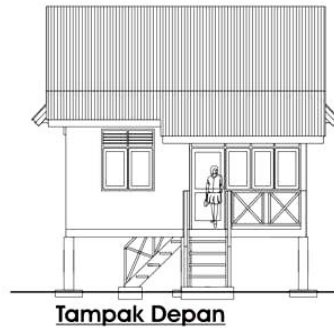
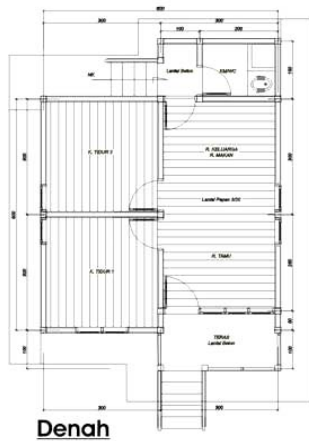
Project



Project Management Consultant (PMC) prepared 18 types of design and specification document on bar bending for reinforcement steel bars.

<Types of design>

18 types of designs are categorized into two groups from view point of space programming. All designs of the each group have programming with difference in roof shape, floor level, floor area and material of roof structure.



Design by :
TIM HOUSING

Type36 Housing : Standard model Elevated floor Type

Housing facilitator

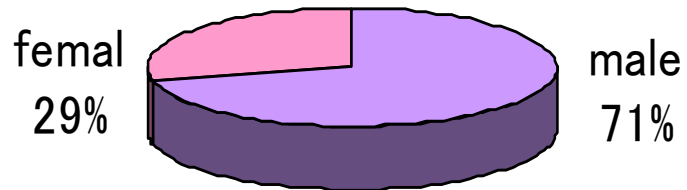


- Housing facilitators as supervisor are one of the most important position for the safer structure.
- We interviewed to housing facilitators (73) for needs assessment of training. The interviews show that most facilitators are young and not enough experience of practice.
- The judging from these considerations, We concluded that the training should focus on basic and practical aspects.

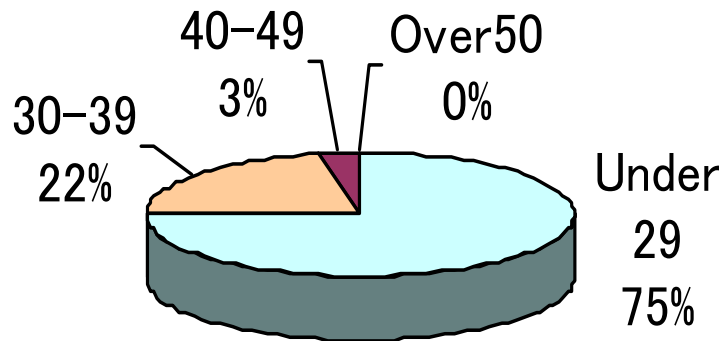
Profile of Housing facilitator

Total No' of Interviewees 73 facilitators

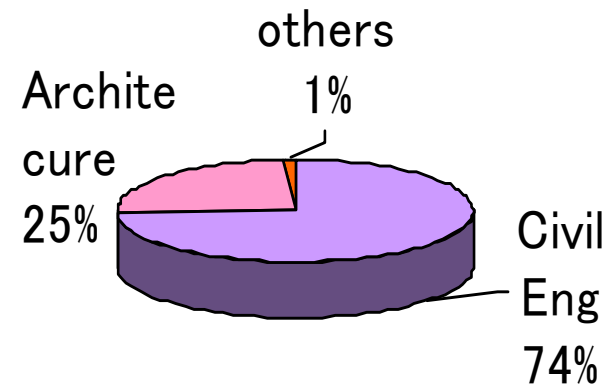
Gender



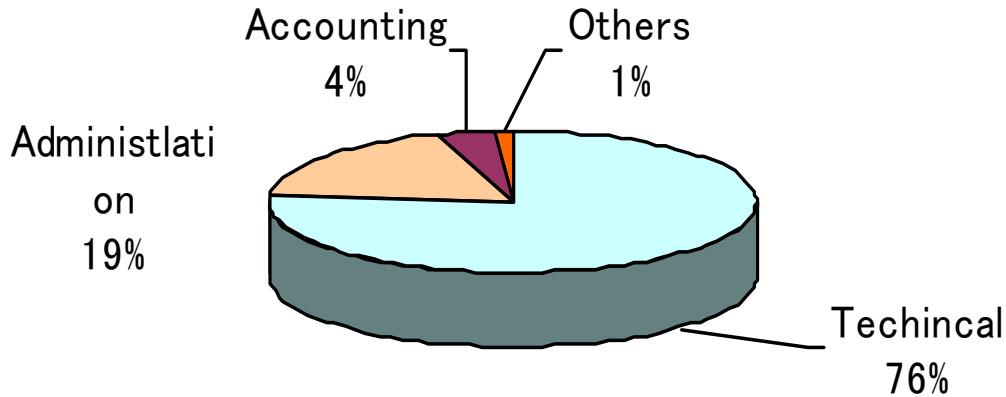
Age



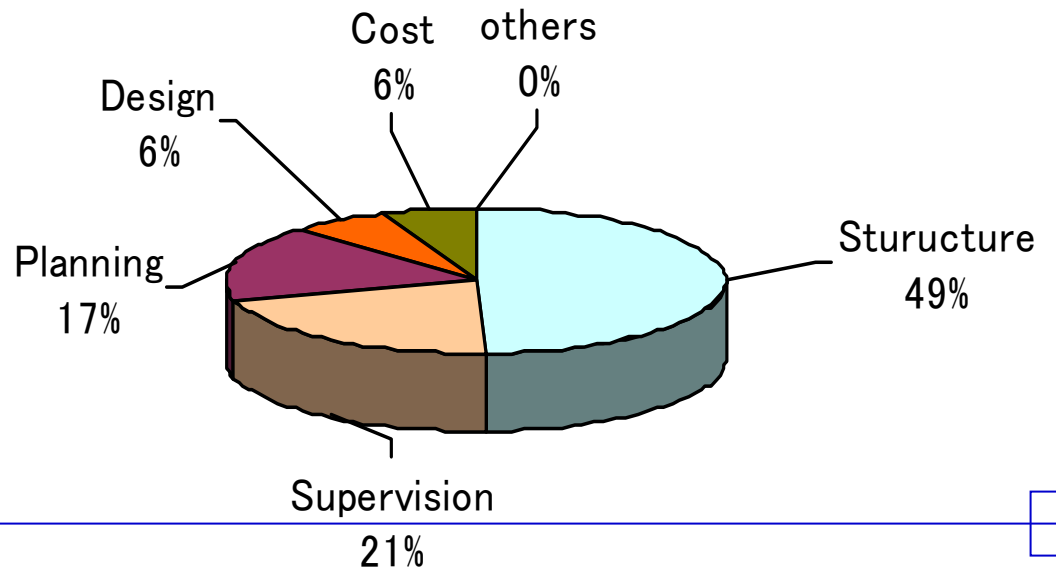
Education Background



Necessary knowledge for Housing Facilitator



Necessary knowledge of Technical knowledge



Trial training activities 1

1, Trial training for housing facilitators on 24th July, 2006

1st lecture : Safe structures – lessons from earthquake damage

by Dr. Yuji ISHIYAMA

2nd lecture : Appropriate construction works and materials

by Hiroshi IMAI

On-site-study : Appropriate construction works

by Dr. Hideyuki KOBAYASHI



1, Trial training for housing facilitators on 24th July, 2006



Lecture purpose are;

- To give basic knowledge covering wide scope from mechanism of earthquake, vulnerabilities of structures, tsunami and experimental facilities for verification of strength.
- To offer basic knowledge on safe structure against earthquake, define the scope of various technologies concerning brick masonry structures which is adopted by MDF-CSRRP and identify points of each technology.

Trial training activities 2

2, Open lessons for housing facilitators, Construction workers and people/communities on 29th July, 2006

1st lecture : Planning of safe and housing

by Dr. Budi Aulia, Syiah Kuala University

2nd lecture : Outline and purpose of Simple Shaking Table Demonstration

by Mr. Tatsuo NARAFU

Demonstration of simple shaking table

by Mr. Ram Chandra K, NSET



2, Open lessons for housing facilitators, Construction workers and people/communities on 29th July, 2006



The message was focused on the very specific point of improvement of construction works in Aceh, which all the agreed to be one of most critical issued in reconstruction project in Aceh.

Earthquake resistant design demands that the structure should have proper detailing so that it can develop the lateral capacity based on the performance.

Since many housing facilitator are working in Aceh.

We noticed that every housing facilitator is very eager to learn knowledge because they are always requested their daily works by the families in the field.

They are one of key players for safer constructions.

