



Workshop in Can Tho University on 4 and 5 June 2012

Resettlement and Awareness raising in Ca Mau province

Presentation by Swiss Red Cross delegate-Nguyen Phu Son

File updated on 27 May 2012

SHELTER

Project

Project name

Country	VIETNAM
Region/town	CAMAU PROVINCE
GIS data (WGS 84)	
Project type	New construction / DDR
Typology	Individual housing /
Approach	Self-help / contracted construction / cash approach ...
Beneficiaries	RESETTLEMENT FAMILIES
Climate	Hot, humid /
Special constraint	flood / high tide / tornadoes/typhoon
start / end of project	March-August 2005, extension in 2009 and 2011-12
Country GNP	USD/cap=650 in 2005

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Partners

Organization (donor)	Provicimis
IO/NGO partners	SRC
GO partners	VNRC and Camau Local Authorities

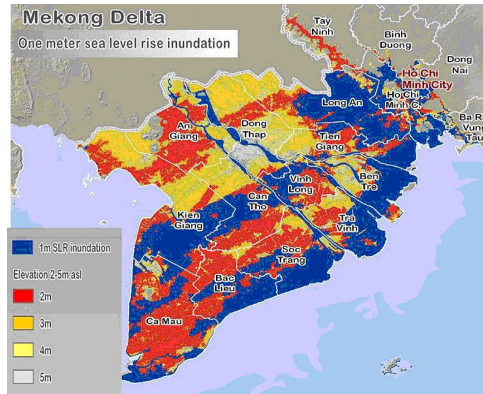
Context to project



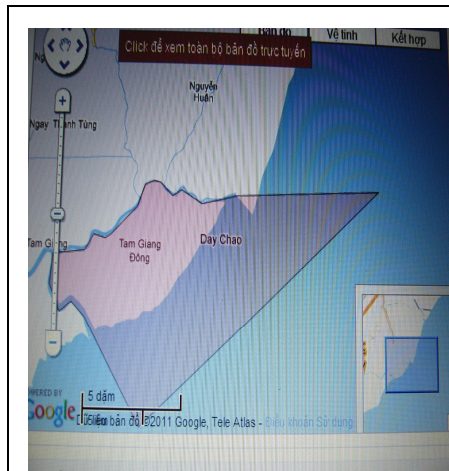
Initial Situation

942 people of 205 very poor families living in eroded coastal area of Hogui River, suffering annually high tides , tornados

They live with no power , no clean water and no school



Sea Level Rising senario within 30 years



Ho Gui map

Hogui before resettled (2003)



Goals, Beneficiaries	To resettle all 205 families (73% in povert list, 27% near poverty list) to new resettled area 5km from old position
Implementations / Results	After 3 years of resettlement , the poor families reduced to 27% in poverty list

Reference data (comparative)

Land plot (per house unit)	9x30 m2	Garden/fish pond	235 m2
Ground floor (incl. walls)	33.6 m2	Floor (incl. walls)	1 floor
Occupants max.	6 persons	Occupants min.	2 persons
Total house area	33.6 m2	Surface / occupant	8.5 m2/cap
House volume (outside dimension)	130 m3	Volume / occupant	33 m3/cap
Number of rooms	2 rooms	Occupant / room	2 cap/room
Heated area	33.6 m2	Heated area/occupant	8.4 m2/cap
cost /unit	1300 USD	cost/occupant	325 USD/cap
cost/m2	40 USD/m2	cost/m3	10 USD/m3
Total housing cost	1300 USD	Self help (beneficiaries)	200 USD/cap
community development projects cost	380,000 USD	Comm. Dev. cost/occupant	400 USD/cap
Dyke/mound elevation	1.0-1.4 m above sea level		

Approach to results

Initial Situation	205 families living in bad shelters, Swiss Red Cross sent project proposal to Swiss Donor , 2 options : steel structure with metal walling or leaves walling : Swiss donor's architect would like to apply wall leaves to prevent sun heat
Approach	Ca Mau project Team preapired the master plan , BHP prepared the drawings
Problems/Constraints	Wall leaves have 4 years life span, families need to repair the wall leaves in 2009
Lessons learned	<p>Livelihood microprojects should be implemented with house projects</p> <p>And LRRD (linking Rehabilitation Relief and Developent) concept shoulb be introduced to projects</p>
Evaluation	Successful project

Legal framework

Politically attached to House and Land permits

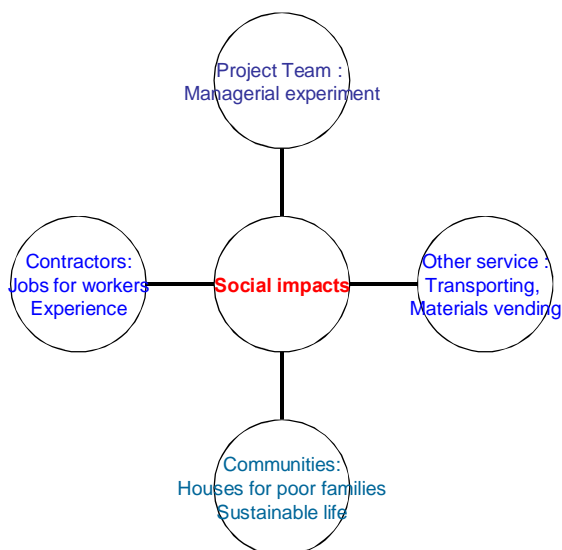
Type of ownership Family ownership

SCOPE OF WORK & SWOT ANALYSIS

Items	Project	No of houses or House units	Project Value (thousand USD)
1	Ho Gui 1	205 + 5 public houses+water station	480
2	Ho Gui 2	30	134
3	Ho Gui 3	40+livelihood components	185+100

SWOT analysis

- “ Strengths
 - . Project Team (SRC and Ca Mau) got experience in Ho Gui I project
 - . Full support from the community , Local authorities
 - . Infra structures connecting Ho Gui I @ II and Communal Office are under construction
 - . SRC sent experts to work closely with the Project Teams
- “ Opportunities
 - . New house concept will be applied for other projects
 - . More funds for house project
- “ Weaknesses
 - . Small scope of work (simple houses only)
 - . Limited budget for house
- “ Threatens/difficulties
 - . The site is far from Ca Mau
 - . Weather : Rains ,sunlight
 - . Salty environment
 - . Price escalation





Construction information

Construction

Structure	Foundations	By galvanized steel screw piers
	Walls or columns	Zinc Allumn collumns , wall leaves
	Facade	Brickwall
	Roof	Spandex Klipklok steel roof
	Earthquake protection	No calculation, 4 richter estimated
materials	Floor surface	Reinforced concrete
	Walls	Wall palm leaves
	Doors	Wooden doors
	Windows	Wooden windows
	Ceiling	No ceiling
	Thermo insulation	Good, thanks to wall leaves and heat-reflect steel roof
watsan	Roofing	Steel sheet
	Water	From drilled well
	Toilets	2.5 m2
	Waste water	Natural drainage to river
equipment	Rain water	Natural drainage to river
	Heating system	No
	Electricity connection	100% from public power
	Telephone connection	Only by mobile phone
	Cooking facilities	By coal , log
Total		100%

Urban planning

Distance to	Health center	1 RC health post of 33.6 m2 at the village+commune Clinic 5km off , at communal office
	Education facilities	1 school of 3 class room with 142 school pupils grade 1-5
	Income activities	Fishing, collecting craps along riverside, small business
	Public transport	No , just invididual 78 motobykes + 27 small boats

For further information

Author / Contact:



Recommended Institutions:	
Recommended partners:	Camau Red Cross Chapter
Recommended books/reports:	
Relevant other projects (links):	Src house project in an Giang & Kien Giang
Annex	

COMPARATIVE ILLUSTRATION

Old lives



Old shelter



Old shelter



Unused market 2006-2011

New lives 2011



New project house 2012




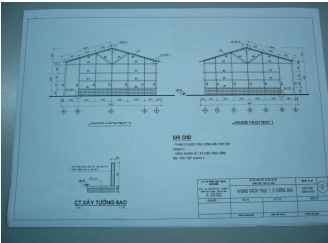




New project house 2009



Fish drying facilities 2012



Relevant illustration
HO GUI I (2005)

 <p>Master Plan</p>	 <p>Drawing of one steel house in Hogui village</p>	 <p>Construction of 205 families houses and 5 public houses starting on March 9 2005</p>
 <p>Houses with flowery gardens Photo taken in 2011</p>	 <p>During summer 2007 vacation, the primary school changed into vocational school</p>	 <p>School unit (built in 2005) of 3 class rooms for 142 pupils</p>

EXTENSION PHASES : HO GUI II AND HO GUI III

 <p>Ho Gui II 2009 / 30 house units</p>	 <p>Ho Gui II -2009 / 30 house units</p>	 <p>Ho Gui III-2012 / 40 house units</p>
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Livelihood component 1- fish drying



Livelihood component 2 - fishpond



Livelihood component 3- Fishnet repair



Livelihood component 5- Solar energy for 2 water stations
March 2012



Solar energy equipment/instrument
March 2012



In Feb 2012, 15 Swiss Vietnam Friendship Association delegates visited Hogui Cooperative Office



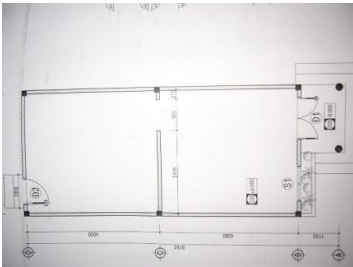
HOUSE UNIT COST FOR FUTURE PROJECTS 2012-...

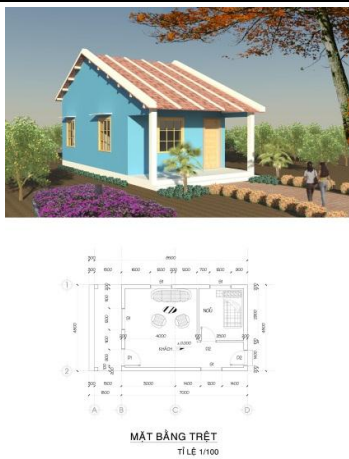

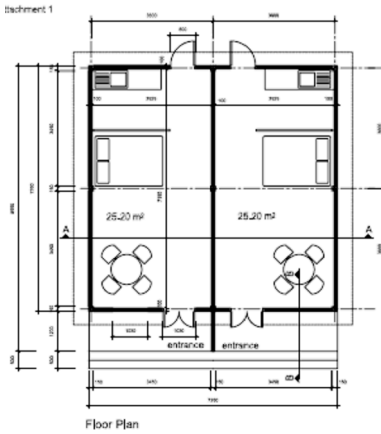
ESTIMATION MADE IN AUGUST 2011

4 MODELS, UNIT COST IN VND

The cost unit including :

10% VAT

Items	Description	Material cost million VND	Labor cost million VND	Subtotal Million VND
 Model 1	House with mezzanine 4x6m Erected on 6 steel screw piers, applied for flooded areas as An Giang , Kien Giang, Dong Thap , Long An	50 (2500-3000 USD) including mezzanine wood floor, walls , windows	3	53
Model 2 = 3.6mx 10m Single house 36m2  Unit rate /m2 = 3.55 milion VND	Isolated concrete footing reinforced by wood piles 6m long, brickwalls, concrete columns, steel roof, steel doors and windows, emulsion wall paint 	81.6	36	111
Model 3 Single house 40m2	Strip concrete footing reinforced by wood piles 6m long, concrete ground beams, brickwalls 20cm thick, brick columns, red tile roof, steel doors and windows Lime wall paint Applied in Phu Yen and Kontum	108.3	27	135.3

 <p>Unit rate per m2 = 3.38 million vnd</p>				
<p>Model 4 Twin house 8.5 x 7.5 = 64 m2</p>  <p>Unit rate per m2 = 3.18 million vnd</p>	<p>Strip or isolated concrete footing reinforced by wood piles 6m long, concrete ground beams, brickwalls, brick columns, steel roof with ventilation ridge, steel doors and windows</p> <p>Applied in Camau</p> 	143	60	203

FUTURE SRC POTENTIAL PROJECTS ON VCA-DRR-1-/2/3 IN CAMAU-BACLIEU - SOC TRANG

Date 22 March 2012

By Nguyen Phu Son



MEKONG DELTA PROVINCIAL MAP includes Camau-Bac Lieu – Soc Trang

Project outputs

The plan of action which will be undertaken through this proposal includes:

- Vulnerability Capacity Assessment (VCA) implemented to coastal communes of districts

Community members and leaders understand fully their own capacity and vulnerability in relation to hazards and disaster risks and are more supportive and encouraged to work together to make the commune disaster resilient

A detailed and clear report of the commune situation in particular relating to vulnerability and capacity, better prepared, prevent and to mitigate disasters.

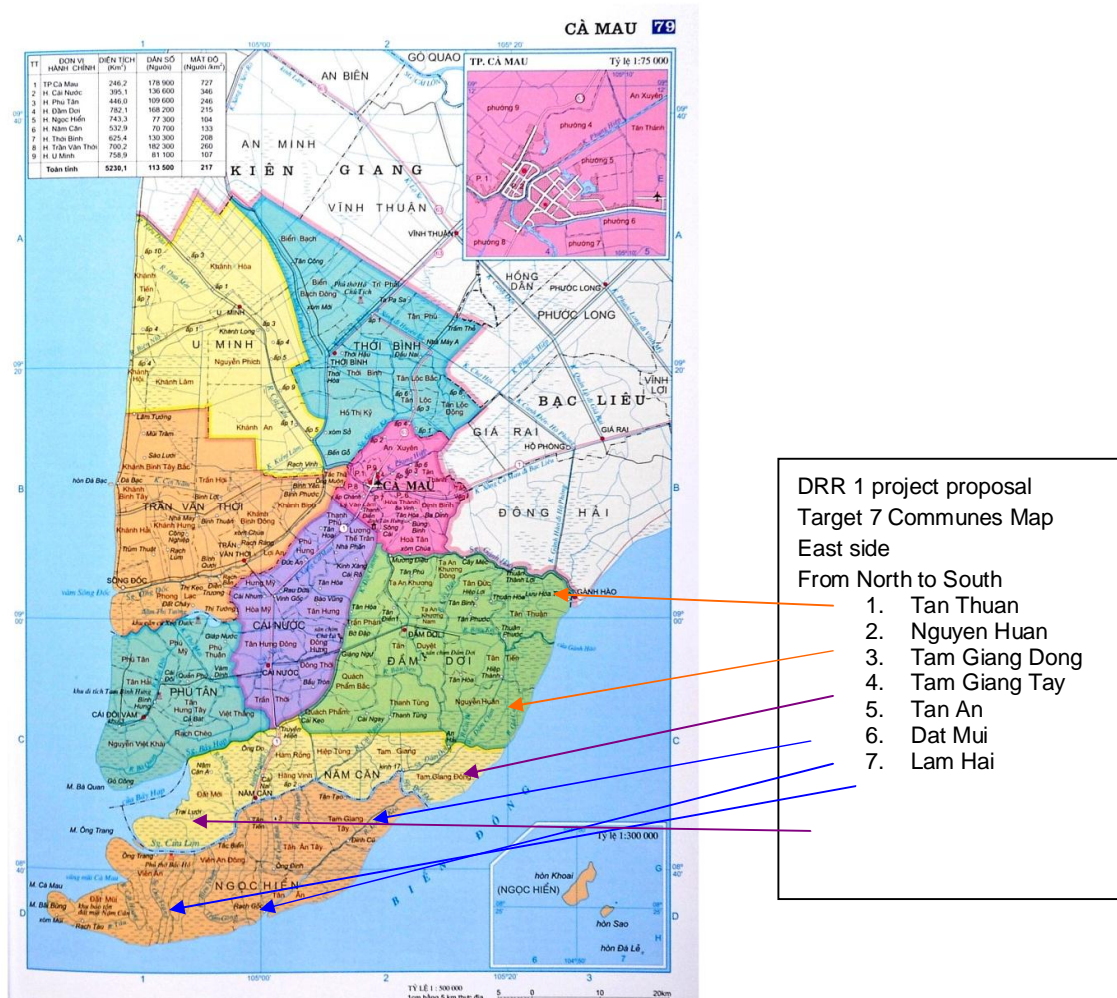
- From the output of VCA implementation, CBDRM (Community Based Disaster Risk Management) Action Plan will be designed for:

Enhance disaster management capacities and awareness of teachers, students and community members through school, community disaster preparedness training courses.

Improve the capacity of branch-level VNRC and community first responders to effectively prepare for and manage disasters



Donated projects at communes partly support the local people in DRR(Disaster Risk Reduction)



VCA DDR -1 for 7 communes in Camau (East Side)

Implementation period : July-December 2012

Districts	Dam Doi	Nam Can	Ngoc Hien
communes	Tan Thuan	Tam Giang Dong	Dat Mui
	Nguyen Huan	Lam Hai	Tan An
			Tam Giang Tay



VCA DRR2
14Target Communes Map
West side

From North to South

8. Ho Thi Ky
9. Bien Bach Dong
10. Bien Bach
11. Tan Bang
12. Khanh Hoi
13. Khanh Tien
14. Song Doc Town
15. Khanh Binh Tay Bac
16. Khanh Binh Tay
17. Khanh Hai
18. Cai Doi Vam
19. Tan Hai
20. Nguyen Viet Kh i
21. Rach Cheo

VCA DRR 2
14 Target Communes and Town Map
West side
Implementation period : Jan-July 2013

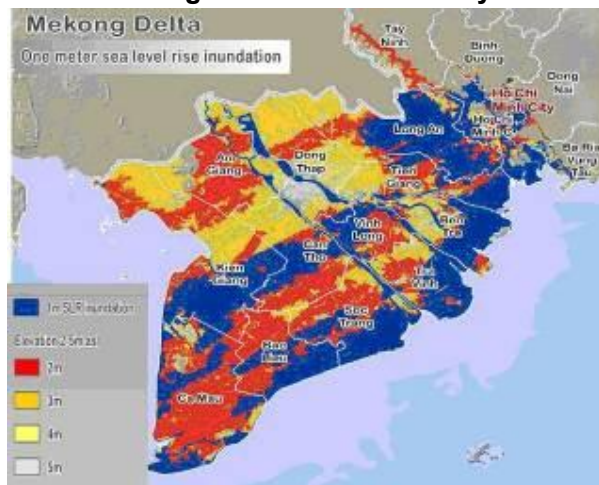
Districts	Phu Tan	Tran Van Thoi	U Minh	Thoi Binh
Communes	Tan Hai	Khanh Binh Tay Bac	Khanh Hoi	Bien Bach Dong
	Cai Doi Vam town	Song Doc town	Khanh Tien	Tan Bang
	Tan Hai	Khanh Binh Tay		Bien Bach
	Rach Cheo	Khanh Hai		Ho Thi Ky
Subtotal	4	4	2	4



Data of 3 provinces : Ca Mau-Bac Lieu – Soc Trang

Items	Camau	Bac Lieu	Soc Trang
Map			
Area km2	5 331 km2	2484 km2	3 312 km2
Coast line km	254 km	56 km	72 km
Population (million)	1. 26	0.8	1.3
Climate change flood impacts in 30-50 years estimated	35% total area	46% total area	43% total area
COASTAL DISTRICTS	Dam Doi-Nam Can-Ngoc Hien . Phu Tan-Tran van Thoi-U Minh	Dong Hai-Vinh Loi-Bac Lieu City	Vinh Chau Town . Tran De . Cu Lao Dung
Project timing	July-Dec 2012 DRR-VCA 1 & 2	Jan 2013-June 2013 DRR-VCA 2 or 3	July-Dec 2013 DRR-VCA 3
Coastal Communes	22	8	12
Communes to be concerned	21	8	12
Commune or town names to be concerned and / or shortlisted	Tan Thuan-Nguyen Quan-Tam Giang Dong- Tam Giang Tay-Tan An- Dat Mui-Lam Hai-Khanh Binh Tay-Khanh Binh Tay Bac- Khanh Hoi- Nguyen Viet Khai-Ho Thi Ky-Rach Cheo-Bien Bach Dong-Bien Bach- Tan Bang-Cai Doi Vam- Song Doc	Ganh Hao-Long Dien Tay- Long Dien Dong-Long Dien Dong A-Vinh Thinh-Vinh Hau- Hiep Thanh-Vinh Trach Dong	Lai Hoa-Vinh Tan-Vinh Phuoc-Vinh Chau Town-Vinh Chau-Lac Hoa-Vinh Hai-Lich Hoi Thuong-Trung Binh-Tran De Town-An Thanh Nam-An Thanh III

Climate Change scenario in 30 – 50 years



The International Centre for Environmental Management (ICEM, 2007) provides the following maps and tables showing the impact of a one metre sea-level rise (SLR) in the Mekong Delta area

Website :

<http://challengechange.org/climate.htm>

Climate change map of MEKONG DELTA-VIETNAM TERRITORY