



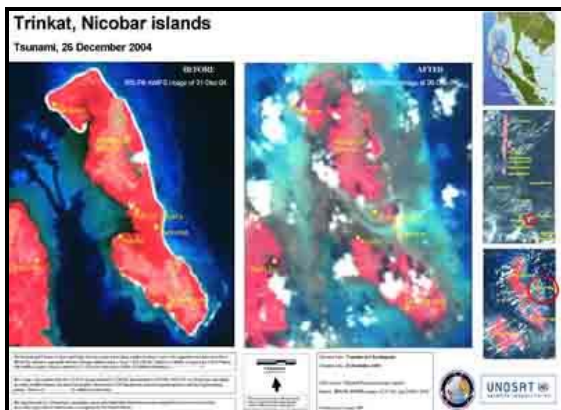
TRINET NEWSLETTER MAY 2007

An Eye in the Sky

The tsunami brought into focus the many new technologies available for disaster mitigation and management. Of these, remote sensing and satellite imagery is perhaps the most powerful. It can be something like an ordinary photograph of the earth's surface taken from a satellite located hundreds of kilometers above the earth. But it can also be much more complex – a picture can be produced by sensors picking up information such as near-infrared light, short-wave infrared light, thermal infrared and microwave radar. On earth, these pictures are processed and interpreted to yield meaningful information. India has developed extensive capacity in remote sensing and images are available from Resourcesat, the Cartosats and other satellites at varying resolutions.

Resolution: The amount of ground covered in one pixel of the image. For example an image with one meter resolution means that each pixel in the image represents one square meter on the ground.

Currently it is possible to have synoptic coverage of almost the entire country with a wide variety of scale possibilities. 3-D mapping from space is also possible.



Images taken before and after the tsunami have provided extensive information on the extent of damage on the one hand, while providing proof

of what mitigated damage, on the other. Thus, before/after images show extent of inundation, as seen for example in the picture of Trinkat in the Nicobars. In other places, the presence of intact ecosystems /vegetation showed why some of the areas were not as badly affected as others. This kind of information not only helps in identifying areas for prioritizing support and directing rescue efforts but also, over the long term, helps in localizing vulnerability.

An example illustrating the potential of remotely sensed imaging and data in the field of disaster management and prevention is UNOSAT, whose goal is to provide the international community with updated and accurate geographic information and to universalize access to satellite imagery. UNOSAT works to facilitate the territory planning and monitoring processes of local authorities, local technicians, development project managers and humanitarian field operators working in coordination with or within the framework of UN activities, on issues such as disaster management, risk prevention, peace keeping operations, post-conflict reconstruction, environmental rehabilitation and social and economic development.

(www.unosat.org)

GIS (Geographic Information System) is a term that used rather extensively these days. It "is a system for capturing, storing, analyzing and managing data and associated attributes which are spatially referenced to the earth" (Wikipedia). "Geographic" is because it deals mainly with spatial features, i.e., an object that can be referenced or related to a particular location in space, "Information" refers to the particular set of characteristics or descriptive attributes and "Systems" to indicate the systems approach used whereby complex environments are broken down into simpler ones for understanding and analysis but they are considered to form an integrated whole.

Five different types of spatial objects which can be represented within a GIS are point, line, area, surface and network and these are represented within a GIS in either a vector format – positional data in terms of x,y coordinates (site plans, CAD drawings...) or raster format – data as an array of

grid cells or pixels (scanned aerial photos, satellite images...).

A GIS tends to be based around the realization that information is a valuable resource to be utilised to its full potential. GIS provide very effective data management, retrieval and analysis tools, but perhaps the greatest strength of GIS is the capability to visualize spatial features and relationships. Knowledge of the location and characteristics of objects as well as their relationships to each other is crucial for effective management, planning and investment decisions. Increasingly it is becoming a statutory requirement for organizations to provide accurate and up to date information for a wide variety of purposes, thus the demand for GIS and other automated data handling systems is likely to increase.

GIS Awareness Booklet (www.geodata.soton.ac.uk)

All the GIS separate the different types of information into data layers and thus a sandwich of sorts can be built up. Since the layers are referenced to a common spatial domain, they can be scaled and overlain in such a way that any given reference point can be located on any of the layers and the data value extracted. The biggest advantage of GIS based maps is that they can quickly be updated, edited, printed or duplicated whereas traditional maps can take days of careful manual labour to achieve the same.

GIS can utilize both the spatial and attribute information stored to perform various tasks including data acquisition and input, data storage and management, data manipulation and analysis and data provision and output.

A cadastral map is a map showing boundaries and ownership of land. Some cadastral maps show, as well as boundaries and ownership details, such details as Survey District Names, Block Numbers (within each Survey District), Certificate of Title numbers, positions of existing older structures, government described runhold section and/or lot numbers and their respective areas, adjoining and adjacent street names, selected boundary dimensions and references to prior founding maps. (Wikipedia)

Recently at the workshop on the status of coastal water bodies in Nagapattinam district, it was explained how satellite imagery and GIS could help in holistic management of resources. Satellite imagery could show up entire watersheds so that the land use pattern could be analyzed across large areas. The irrigation and drainage channels, the various kinds of waterbodies etc could be easily located and best locations for additional water storage structures could be identified. Currently many things such as ground cover, geomorphology, groundwater prospect zones etc have already been mapped. These could be overlaid with administrative boundaries, infrastructure, human settlement, demographic information etc. Similarly flood vulnerability mapping can be done so that ahead of the floodwaters, people can be evacuated depending on the flow and direction of flow estimated from a time series of satellite images. Based on such information based decision support systems, action plans could be generated not just for local areas but for holistic sustainable development.

Useful Reads

GIS and Emergency Management in Indian Ocean Earthquake/Tsunami Disaster. An ESRI® White Paper, May 2006. <http://www.esri.com/library/whitepapers/pdfs/gis-and-emergency-mgmt.pdf>

This white paper addresses the utility of geographic information system (GIS) technology in support of the Indian Ocean tsunami relief efforts. The enormity and the reach of the tsunami event illustrate the challenges of data acquisition, integration, and sharing across jurisdictions and varying data systems. This paper describes the event, responses, and attempts to underscore the challenges of data sharing in a dynamic environment. In this case, lessons learned can make a difference when lives literally hang in the balance. Within these approaches, GIS is one of the high-end technologies that can help save lives and

property. To better address its role, ESRI wanted to know how GIS is being used for humanitarian efforts in response to this disaster. Hence, this paper attempts to identify how GIS technology supported rescue and recovery efforts as well as continues to support rehabilitation efforts. The lessons learned from a GIS perspective are

- The database should be ready beforehand.
- The imagery database should be kept up to date.
- The GIS technology usage level should be more advanced to make better use of its capabilities.

- Country-based sociopolitical issues should be handled with care when implementing actions, especially for the recovery phase.
- Government, private, and local agencies accompanied by international agencies should

collaborate closely for emergency actions and employ GIS. International, national, and local agencies should go beyond investing in crucial life support and invest in GIS.

Putting People and Health Needs on the Map: WHO, 2007 (In Press)

The launch by WHO of an innovative public health mapping programme which promotes the use of computerized Geographical Information Systems (GIS) to improve disease surveillance, is transforming the way geographically linked information can be used to monitor disease, improve health care, and save lives.

This publication shows how health mapping is being used by decision-makers to identify populations at risk, assess health care coverage, guide health sector strengthening, highlight the geographical spread of diseases and stratify risk factors. It also helps assess resource allocation, plan and target interventions, support the

monitoring and analysis of trends and support advocacy and fundraising.

Part 1 highlights some of the ways in which health mapping and GIS are being used both in countries and at the global level to inform decision-making and improve health care. Part 2 looks at how public health mapping and GIS are being used across the board to support global efforts to roll back malaria. Part 3 examines how public health mapping and GIS are poised to become cutting-edge tools for disease surveillance and global health security in the 21st century.

<http://www.who.int/bookorders/anglais/detart1.jsp?sslan=1&codlan=1&codcol=15&codcch=698>

Meetings ...

State-level consultative meeting on Coastal Water Bodies in Nagapattinam district: *The current status and identifying solutions for improvement*

This was held at Chennai on April 25, 2007. The technical session in the morning was chaired by Dr. A. Vaidyanathan, Former member of the Union Planning Commission who welcomed the initiative as it was one of the first in addressing very complicated problems of resource management from the grassroots. He said that it was an ironical bit of good luck that the tsunami and its aftermath created a network of organizations and brought all the stakeholders together to look at the problems not just in words in terms of a comprehensive integrated look but really getting down into the nitty-gritty.

Dr R.N. Sivanappan, team leader for the study commissioned by NCRC explained in detail the choice of the study area and the methodology for the study. He said that the team had surveyed the various water bodies



such as irrigation and drainage channels, tanks, ponds and wells of various kinds not only for their numbers but also for their status in terms of siltation, encroachments and utility. Following on the survey, estimates were made as to how much it would cost to bring the systems to the designed working conditions. The executive summary of the study is included in the next section.



Mr. PG Diwakar, Head, RRSSC, ISRO who spoke about "Satellite Remote Sensing for Resource Mapping" showed how satellite imagery and remote sensing techniques could be used to supplement the ground data so that holistic information could be made available to planners.

Mr Deenadayalan, Advisor (Schemes) PWD talked about the problems of Nagapattinam district and

his improved understanding of the issues after listening to the presentation of the study report. He said that the idea of converting alams into storage tanks was good as it would also help groundwater recharge. Keeping river mouths completely open by dredging was a problem but semi-open options could be tried out. After tsunami, drainage issues were being looked into and nine schemes funded by the World Bank to the tune of Rs 19.7 Crores were being taken up.



The afternoon session began with a panel discussion chaired by Sri V.Vivekanandan. The panelists included Dr Janakarajan of MIDS, Mr Oswald from Kudumbam, Mr Shyam Sunder of Christian Aid, Mr Giridharan, a Nagapattinam farmer and Mr. Mahalingam, Chief Engineer from the Groundwater board. The open discussion that followed raised questions on aquafarms and the role they play in salination of land and water, the slow pace of sanctioned works being carried out, why bulldozers are better than poclines, a call to the donor community to invest in technologies such as remote sensing, likely usefulness of joining hands with the forest department in combating salinity by appropriate tree plantation and the need to restore usage of traditional varieties of paddy.

Mr Ranganathan, General Secretary of the Cauvery Delta Farmers Welfare Association spoke on behalf of the farmers. He said that the water hyacinth removal was an important problem and he had tried a herbicide (2,4-D) in a small area and that it had worked and suggested that the same be tried in other areas as well. He also suggested that rather than taking up works piecemeal, a river system could be completely rejuvenated.



Ms Annie George, CEO, NCRC, presented the way forward. She said that there was a need for a holistic perspective that sees water as a resource that must be managed and that the situation required a combination of technical and social interventions including setting up/strengthening of institutional mechanisms for sustained effective operation and maintenance. It was necessary to start with Participatory Irrigation Management (PIM). NCRC planned to pilot the PIM procedure in 3 Tail End Regulator (TER) systems supported by Concern Worldwide.

In the plenary session, Ms Annie George welcomed the Chief Guest, Thiru Durai Murugan, Minister for Public Works and Law, Tamil Nadu and explained about NCRC and its involvement in agriculture rehab. Dr Sivanappan made a detailed presentation about the study stressing on the cost escalations and the immediate need to take up the works on a watershed basis. The study report was released by the minister who then gave a long speech touching on many issues and assuring support for NCRC in their work. The Minister said his department would go into the study. Formulating a scheme and implementing it over the next three-four years in phases might be possible. The World Bank had come forward to provide assistance.

The discussion that followed saw members from the farming community as well as the others in the audience raise pertinent questions with respect to the topics elucidated by the speakers.

He said the Government was considering prosecuting those who encroached upon PWD land. A detailed report will soon be available on the TRINet website www.trinet.in

Review meeting on tsunami relief and rehabilitation

A meeting to review progress of the recommendations made in October 2005 was held at Chennai on 5th April 2007. Ms. Nirmala Venkatesh, Member of the National Commission for Women, K.M. Ramathal, chairperson, Tamil Nadu State Commission for Women, and Justice J. Kanagaraj were among those present. A crowd of women from tsunami affected areas put forth their grievances which related mainly to non

receipt of compensation and other relief packages. There was also discussion on plans for Srinivasapuram, a tsunami affected hamlet in Chennai, whose residents voiced concern about plans to move them out of the area. Questions from the audience were answered by Mr C.V. Sankar, OSD (R&R) and Ms Jaya, the Chennai Collector. At the end of the day, recommendations put forth included identifying

women involved in fishing-related activities, immediate provision for providing permanent housing in the same localities, desilting of river

mouths, compensation to the injured, halting of illegal prawn farming and assistance to river-fishing communities affected by tsunami.

Workshop on Sustainable Livelihoods Enhancement, Diversification and Financial Services in Coastal Fisheries

This two day workshop held on 23rd and 24th of April was to share information about two studies undertaken on behalf of the UNTRS/FAO. The first study analyzed the historical as well as the current livelihood enhancement and

diversification strategies by fishermen in India. The second study, on financial services to the fisheries sector, covered Tamil Nadu and Kerala coasts and shows how to make fisher folk, especially marginal fishermen, credit worthy.

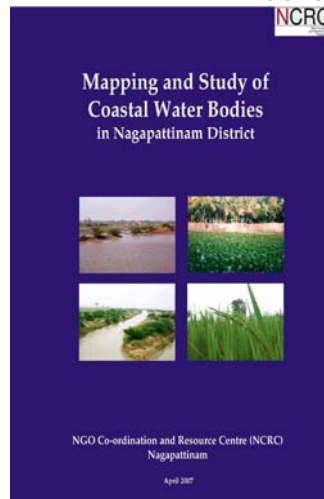
Coastal Water Bodies in Nagapattinam - A Study

This study titled "Mapping and Study of Coastal Water Bodies" was commissioned by NCRC, Nagapattinam, supported by Concern Worldwide and was carried out by Dr RK Sivanappan and associates. Highlights from the executive summary are given below:

- Nagapattinam is one of the coastal districts in Tamil Nadu and is a part of the Cauvery river basin and delta. The Cauvery delta begins from the Grand Anicut near Tiruchirapalli, constructed more than 1800 years ago by King Karikalacholan. The main direction of the flow of the River Cauvery is east and the delta spreads northwards and southwards from Grand Anicut. The distributaries originating from the Cauvery finally discharge their waters into the Bay of Bengal.
- Being at the tail end of the Cauvery delta, Nagapattinam is at the mercy of the water flow from the Mettur dam. Located on the Bay of Bengal coast, it is also frequently hit by cyclones that bring in large quantities of rain in short spells. Alternate periods of water scarcity and flooding have resulted in frequent crop losses and a steady decline of cropping area under paddy, the main crop of this region. The 2004 tsunami was, therefore, only another disaster to contend with for the farmers of Nagapattinam.
- While working on the rehabilitation of farmers affected by the tsunami, it became apparent that the malaise went much deeper.

NCRC, supported by Concern Worldwide, commissioned a study to understand the different vulnerabilities faced by the farmers, belonging mostly to the marginal farmers group, of Nagapattinam. This study highlighted, inter-alia other findings, the high degree of sensitivity of the area to flooding or drought- like conditions and to the poor status of the irrigation and drainage mechanisms prevailing in the area. Successful post-tsunami interventions, by some NGOs, in correcting such identified flaws in small pockets, only validated this finding.

- Based on this understanding, NCRC, again strongly supported by Concern Worldwide, followed up with another study with the following objectives:
 1. *Collectively address the issues of identifying, prioritizing and planning the course of action to improve the irrigation and drainage infrastructure, including the canals and all water bodies, that have been neglected leading to frequent flooding and salination.*
 2. *Influence the Government / NGOs and farmers to maintain these life support systems of agriculture as the quickest means of disaster proofing of agriculture in the district.*
- The study area was spread in all the taluks of the district except Mayiladuthurai and worked out to about 92,851 ha out of the total geographical area of 2,71,583 ha of the district, covering 148 revenue villages including 779 hamlets. The irrigated area studied (31,500 ha) is 28% of the total



irrigated area of the district. Five NGOs were involved in the study, each covering one taluk.

- A Coordinator from NCRC facilitated the entire process. Dr. R.K. Sivanappan, erstwhile member of the State Planning Commission and former Dean of the Agriculture Engineering College, Coimbatore, who is also an Expert in Water Resources Development was the Team Leader for the Study. Apart from NGOs, the study was a collaborative effort with the involvement of personnel from PWD, AED, Ground Water Department (both Central & State), TWAD Board and other line departments. The farming community was involved throughout the study at various stages.
- Irrigation channels and drainage channels at various levels, standing water bodies such as ponds, tanks, *ooranis* and *alams* and different kinds of groundwater sources such as wells and bore wells were mapped. There are 1141 irrigation channels running up to 1324 km with an ayacut of 25509 Ha while there are 180 drainage channels with a total length of 346 km. 1075 village ponds, 652 farm ponds, 6437 wells, 4 irrigation tanks and 6 *alams* were also found in the study area apart from the Vedaranyam Canal and the Buckingham Canal.
- Siltation, damages to bunds and other structures like shutters and notches, deliberate encroachment for cultivation, aquafarming, habitation and weed infestation were the common adverse conditions found across most of the water bodies; more so in the drainage channels than the irrigation canals.
- The Study estimates a total amount of Rs. 125 Cr. for desilting, weeding, repairs and maintenance and construction of some additional structures in the total area of the 14 TERs studied. This is designed to not only restore the efficiency of the irrigation and drainage channels and other water bodies but also improve their potential for additional storage of fresh water.

Irrigation Channels:

- *Damages:* 526 of the 1141 irrigation channels showed siltation to the extent of 6.7 lakh m³. 147 of channels had bund damages requiring 1.67 lakh m³ of earth work. 35 ha of channel area showed high levels of weed infestation. 147 sluices require various levels of repairs and 107 shutters need to be repaired/ replaced.

- *Estimate for repair/ maintenance/ new construction:* The total cost of repairs, maintenance and additional construction in the irrigation channels is estimated at Rs.264.88 lakhs. Desilting of the irrigation channels is estimated at Rs. 122 lakhs, repairs of the damaged bunds at Rs. 28.34 lakhs, weed removal at Rs. 13.86 lakhs, repairs of shutters/ sluices and other structures at Rs. 86.35 lakhs and construction of additional structures at Rs. 13.69 lakhs.

Drainage Channels:

- *Damages:* 138 of the 181 channels show siltation to the extent of 34.3 lakh cubic mtrs. 6.36 lakh cubic mtrs. of earth work is required to repair the bund damages seen in 99 of the channels. 27.6 ha of the drainage channel area are seen to be heavily weed infested.
- *Estimate for repair/ maintenance/ new construction:* The total cost of repairs, maintenance and additional construction in the drainage channels is estimated at Rs.887.08 lakhs. Desilting of the drainage channels is estimated at Rs. 751.91 lakhs, repairs of the damaged bunds at Rs. 114.36 lakhs, weed removal at Rs. 11 lakhs, and repairs of other structures at Rs. 9.8 lakhs
- Positioning of the TERs at long distances from the confluence of the river and the sea, coupled with the low slope gradient has resulted in high levels of salination of the water as well as farm lands leading to conversion of cultivable land to either fallow land or shrimp farms. This Study has highlighted the need for additional regulators closer to the sea for effective blocking of ingress of sea- water during high tides and to increase the potential of fresh water storage. Construction of additional regulators is estimated to cost Rs. 1956 lakhs.
- The total estimate also includes Rs. 1500 lakhs for restoration of the Vedaranyam Canal, construction of additional ponds at Rs. 3972 lakhs and a detailed study of Buckingham Canal
- This intervention is estimated to restore and improve the production and productivity of 30000 ha of cultivable land. For this intervention to be sustainable, the Study also recommends a "Participatory Irrigation Management" approach with the farming user community taking the responsibility of the continued operation and maintenance of these water bodies.

The Government of Tamil Nadu has so far sanctioned funds to the tune of Rs 1770 Crore upto 28.02.07 for relief and rehabilitation activities in the areas affected by tsunami with the assistance of Government of India. Of the 22346 houses completed, 14369 houses have been handed over to the beneficiaries. The scheme for tuition fees and special fees payable by the

students of Tsunami affected families to be borne by the State Government has been extended for the academic year 2006-07. In addition, the students will be exempted from payment of examination fees for 2006-07. The details of relief on the various items of assistance are available at www.tn.gov.in/TSUNAMI/tsunami-relief.htm

Rehab News Snippets

Tamil Nadu

Housing and Infrastructure

Houses in Vallavilai: SIFFS, as part of its Tsunami Rehabilitation and Reconstruction Programme handed over of 85 houses for the fisher-people of Vallavilai village, Kanyakumari district. The 'Keys Handing over Ceremony' was held on the 21st of April at Vallavila. SIFFS chairman presided over the

function and the Kanyakumari district Collector, Dr Swarna handed over the keys to the Beneficiaries. A health centre was also inaugurated.

[Source: SIFFS](#)



New tsunami housing list: Chennai

: The first list of allottees for permanent shelters in Nochi Kuppam and Nochi Nagar as part of the tsunami-rehabilitation process has been cancelled and a new list prepared. The list was prepared taking into account the zonal office census of houses lost to the tsunami and the petitions given by the residents to the Collectorate. The new list has been put up for public viewing at the Chennai Collectorate, the Tahsildar's Office for Mylapore-Triplicane Taluk, the Corporation Zone 10 office at Lattice Bridge Road, Adyar, the Ward Office for Ward 145 at 4, Kamaraj Salai, the D5 Police Station on Marina Beach, the E1 Police Station in Mylapore and the Tamil Nadu Slum Clearance Board on Kamarajar Salai.

<http://www.hindu.com/2007/04/03/stories/2007040318450400.htm>

Homes unveiled for the tsunami-affected:

Chennai: Turmeric yellow and vermilion markings framed by intricate kolams adorned the doorsteps of new homes built in Indira Gandhi kuppam, a

tsunami-affected hamlet in Ennore. When Fisheries Minister K.P.P. Sami entered one of the homes, he was greeted with a glass of milk to mark the housewarming ceremony on Wednesday. Residents burst firecrackers to celebrate the new houses, sponsored by non-governmental organisations Action Aid India and Arunodhaya Centre for Street and Working Children. Mr. Sami urged the residents to participate in the State government's welfare schemes for fisher families.

<http://www.hindu.com/2007/04/05/stories/2007040517720500.htm>

7,000 houses being readied for tsunami-hit:

Nagapattinam: Nearly 7,000 permanent houses are being readied in various coastal areas and keys would be handed over to tsunami-hit families by the end of next month, Collector Tenkasi S. Jawahar has said. He was addressing a function after receiving keys of 307 houses and multipurpose disaster shelter constructed by Church's Auxiliary for Social Action (CASA) at Thoduvai near Sirkazhi on Tuesday.

<http://www.hindu.com/2007/04/04/stories/2007040411770500.htm>

Tsunami-hit seek allotment of houses:

Nagapattinam: A large number of tsunami-hit families in the district represented to the Collector, Tenkasi S. Jawahar, on Monday for allotment of permanent houses immediately stating that they were finding it difficult to live in temporary shelters. Members of several tsunami-hit families appealed to allocate houses wherever available. The Collector, who received 275 petitions, assured that most of the permanent houses would be handed

over to the beneficiaries by the end of next month. He said that the list of selected beneficiaries was being displayed in panchayats and taluk offices and assured to take action if any eligible person was left out in the list.

<http://www.hindu.com/2007/04/10/stories/2007041007660500.htm>

Tsunami-hit seek better facilities: Nagercoil: The Kanyakumari Resource and Research Centre (KRRC), a liaison body between the Government, various non-governmental organisations and the other stakeholders involved in tsunami rehabilitation, has urged the district administration to ensure enough time for people to register their grievances. A resolution to this effect was unanimously passed at the State-level stocktaking consultation meeting held here on Thursday. Before finalising the beneficiaries for the housing schemes in the coastal villages on April 16 in the special Grama Sabha, the local village rehabilitation committees and the community-based structures should be consulted and the list of beneficiaries should be prominently displayed. The forum requested the Government and the district administration to ensure that three cents of land be provided to each house, in addition to the lands for community infrastructures.

<http://www.hindu.com/2007/04/13/stories/2007041315730500.htm>

202 houses handed over to tsunami victims: Tuticorin: A total of 202 permanent houses, constructed by Development Promotion Group (DPG), a Chennai-based non-governmental organisation, on an outlay of Rs. 4.64 crore at Ceylon Colony and Azhagapuri near here, were handed over to tsunami victims of Terespuram and Madhavan Nair Colony on Saturday. The Minister for Animal Husbandry, Geetha Jeevan, handed over the keys of the houses to the beneficiaries in the presence of the District Collector, R. Palaniyandi. While Diakonie Emergency Aid, Germany financed the construction of 134 houses, Church Development Services, Germany, funded for 58 houses. The Association of Confederation of Credit Unions, Bangkok, assisted the construction of remaining 10 houses. Besides providing land for the project, the district administration has constructed an overhead tank with a capacity of 30,000 litres and erected 10 public taps. After receiving the keys of their new homes, the beneficiaries appealed to the Collector to operate buses from their colony in the small hours so that they could reach the seashore and subsequently for fishing without any trouble.

<http://www.hindu.com/2007/04/15/stories/2007041508800500.htm>

Fishermen wary of moving into permanent houses: Nagapattinam: While the district administration and the tsunami relief and rehabilitation agencies are urging the non-governmental organisations to expedite construction of permanent houses to complete them by the end of next month for handing over to the tsunami victims, fishermen in several areas are reluctant to occupy the houses allotted to them. The district administration has its hand full with numerous problems — construction of permanent houses, shifting the tsunami victims from the temporary shelters, and solving the unhygienic conditions in the houses being built by the NGOs before handing them over to the beneficiaries. The inordinate delay of more than nine months by the Government after the tsunami to take a decision in selecting suitable land for construction of permanent houses within the 500-metre coastal regulatory zone and the hurried approval for about 10 designs of houses without proper planning for toilets are cited as factors that led to the problems.

<http://www.hindu.com/2007/04/22/stories/2007042214370500.htm>

Houses handed over to tsunami-hit families: Cuddalore: Avo International, a German organisation, along with the Swiss Labour Assistance, has undertaken to construct 100 dwelling units for the tsunami-affected people of the Samiarpettai, Chinnur and Indira Nagar coastal villages. Of these, 45 houses have been completed through the Life Help, a non-governmental organisation. District Collector Rajendra Ratnoo handed over the keys to the beneficiaries at Samiarpettai on Friday. Director of Avo International Friedemann Koenigter said the houses at Chinnur and Indira Nagar would also be completed soon.

<http://www.hindu.com/2007/04/23/stories/2007042302340500.htm>

Efforts are on to speed up tsunami rehabilitation works, says M.K. Stalin: Nagapattinam: The Government has taken special efforts to complete tsunami rehabilitation works, including construction of permanent houses, in Nagapattinam district, Minister for Local Administration M.K. Stalin said on Saturday. Inaugurating Tata Colony, comprising 828 permanent houses and two community amenity centres, built by the Tata Relief Committee at a cost of Rs. 22 crore at Akkaraipettai here, Mr. Stalin said Chief Minister M. Karunanidhi, immediately after assuming charge, had convened a meeting of Collectors of the tsunami-hit districts and directed them to speed up the rehabilitation works. The Tata Relief Committee had also provided infrastructure in the colony including a sewage treatment plant, two community amenity centres, desalination plant,

solar-powered streetlights and two village knowledge centres.

<http://www.hindu.com/2007/04/29/stories/2007042904070400.htm>

Steps taken to ensure adequate water supply in Nagapattinam:

Nagapattinam: Inaugurating the combined water supply scheme for Nagapattinam and Velankanni at Poompuhar organised by the district administration, the Minister said that the district would not face water scarcity and pointed out that the Anaikarai-Kollidam combined water scheme would cater to the drinking water needs of Kilvelur, Nagapattinam and Vailankanni areas. The Minister also handed over the keys of 350 permanent houses to tsunami survivors of Poompuhar constructed by 'SEVAI', a non-governmental organisation, at a cost of Rs.6.47 crore.

<http://www.hindu.com/2007/04/30/stories/2007043011380500.htm>

Survey on houses for fishermen held:

Nagapattinam: C.V. Sankar, Officer on Special Duty, Tsunami Relief and Rehabilitation, and a three-member team from the World Bank conducted a preliminary survey at several places in the coastal belt of Nagapattinam district on Thursday for providing concrete-roof houses for the fishermen living in thatched huts and mud houses within 1,000 metres of the shoreline. The consultants — E. Narayanan, Shankar Narayanan and S.Vaideeswaran — along with Mr. Sankar and Tenkasi S. Jawahar, Collector, inspected the huts and mud houses at Poompuhar, Kumarakudi, Chinnangudi, Tarangampadi, Nagapattinam and Velankanni areas and interacted with the fishermen. Later they held discussions at the Collectorate with the participation of representatives of non-Governmental organisations.

<http://www.hindu.com/2007/04/27/stories/2007042710240500.htm>

2,160 coastal houses to be rebuilt in Cuddalore:

Cuddalore: A total of 2,160 houses, located in the coastal areas and near the backwaters of Cuddalore district, have been identified as the most prone to natural calamities. As there is a proposal to construct permanent houses for them, the World Bank team visited the Pachankuppam on Wednesday to inspect condition of the houses. The team comprising Narayanan, Sankar Narayanan and S. Vaitheeswaran, held talks with C.V. Sankar, Special Officer (Relief and Rehabilitation), Rajendra Ratnoo, District Collector, and other officials. According to the Collector, the State Government had classified the dwelling units into two categories: those located within 200 metres of the shoreline, and those located beyond 200 metres but within 1,000 metres from the shore. In the enumeration

carried out during November and December 2006, it was found that 2,160 houses (excluding those damaged by the tsunami) ought to be reconstructed as permanent structures. Of these, a majority of them (1,440 units) were lying within the 200-metre limit. The Collector noted that the tentative list of beneficiaries were put up at the offices of the panchayats, panchayat unions, village administrative offices, at the fair price shops and the buildings of self-help groups.

<http://www.hindu.com/2007/04/27/stories/2007042704400500.htm>

2,793 houses to be built in Pudukottai district:

Pudukottai: A total number of 2,793 houses will be constructed under the Rajiv Gandhi Group Houses Scheme in the coastal areas of the district for the benefit of the tsunami-hit fishermen. The houses would be built in various villages in Manamelkudi and Avudaiyarkoil blocks. The villages included R. Pudupattinam, Gopalapattinam, Ganapathipattinam, Krishnajiipattinam, Yenadi, Ammapattinam, Alathur, Parayanendal, Arasaneripattinam, Semankottai, Seyyanam, Athivayal, Viswanathapuram, Avudayaripattinam, Seetharamapattinam and Kattumavadi.

<http://www.hindu.com/2007/04/28/stories/2007042805500500.htm>

Build permanent bridge at Manakudi:

Nagercoil: The Master Trust, a non-governmental organisation based at Kothaigramam village near Nagercoil has urged the Government to construct a permanent bridge between Keeza and Mela Manakudi, which was washed away in the tsunami. The Director of the Trust, Tho. Nainar, said that the bridge across Pazhayar River connecting Mela and Keeza Manakudi villages, affected the vehicular traffic. Absence of the bridge forced the people to take a circuitous route of more than 12 kilometers. However the Government immediately took steps for providing a temporary steel bridge at a cost of Rs. 1.40 crores. A permanent bridge has been sanctioned at a cost of Rs. 9 crore. The trust wants the Government to expedite the process of building a permanent bridge at the earliest.

<http://www.hindu.com/2007/04/08/stories/2007040811370500.htm>

Permanent houses lack proper sanitary facilities:

Nagapattinam: There is an urgent need to study the drainage and sewage facilities in the permanent houses built for tsunami victims in the district. Any delay will have a disastrous impact, according to an IAS officer looking after tsunami rehabilitation and reconstruction activities. Now, owing to bad planning and designing and execution of the toilets in the permanent houses built for the tsunami victims, the NGOs feel that open defecation is far better, which the fishermen were used to all

these years. The crisis management effort of the UNICEF, as a last resort, opened 'temporary toilets' early this month in the permanent houses in Thethi village, hardly a km from the Collectorate. A visit to the permanent shelters built by various agencies

has revealed some shortcomings which if not corrected early threaten to make many of these shelters man made slums.

<http://www.hindu.com/2007/04/16/stories/2007041607520500.htm>

Livelihoods

Community-based livelihood project for tsunami victims: Nagapattinam: The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Bangkok, in association with Development Promotion Group, a Chennai-based non-governmental organisation, launched a community-based livelihood project for tsunami victims at Velankanni in the district on Friday. Miguel Perez Ludena, Economic Affairs Officer of UNESCAP, Bangkok, inaugurated the Rs.50-lakh project by starting a training programme in garment making for girls and women of the tsunami-hit areas. He said that the UNESCAP and the DPG would achieve the goal of livelihood support for the affected communities through the field project.

<http://www.hindu.com/2007/04/14/stories/2007041408070500.htm>

Good response to training in garment making: Nagapattinam: Girls and women from several

tsunami-hit villages in the district evince keen interest in joining the four-months free training course in garment making offered by the Development Promotion Group (DPG), a Chennai-based NGO in association with the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). The training programme was inaugurated recently by Miguel Perez Ludena, Economic Affairs Officer of UNESCAP, Bangkok, at Velankanni. R. Bhakther Solomon, Chief Executive Officer, DPG, said on Sunday that it had been decided to train 50 to 100 girls and women from the tsunami-hit villages in garment making. Thereafter, the DPG would identify a private company and establish in consultation with the UNESCAP, a garment production unit under the public private partnership scheme.

<http://www.hindu.com/2007/04/23/stories/2007042304640500.htm>

Andaman and Nicobar Islands Housing and Infrastructure

LG inspects permanent shelters at Hut Bay & Bambooflat: The Lt. Governor, Lt. General (Retd), Bhopinder Singh, PVSM, AVSM, accompanied by the Chief Secretary, Shri Chhering Targay and a team of senior officers of the A&N Administration today inspected the permanent shelter sites at Onge Tikrey and Farm Tikrey at Hut Bay. During his visit to these places, the Lt. Governor interacted with the people, who are likely to occupy the permanent homes and assured them that construction of the permanent homes will be completed as per the scheduled date. "All the minor modifications as desired by them will be incorporated so that they are fully satisfied and happy at the time of taking over these homes". On completion of the visit, the Lt. Governor returned back to Port Blair in the afternoon on the same day. Later, in the afternoon the Lt. Governor visited permanent shelter site at Bambooflat, where he directed the concerned authorities to undertake minor modifications in the permanent homes as desired by the people. Interacting with the media persons, the Lt. Governor informed them that construction work for the permanent homes is progressing as per schedule and he would be

personally monitoring the progress of the construction work.

<http://www.and.nic.in/thursday.htm>

LG inspects permanent shelter sites at Campbell Bay: Port Blair, April 23. The Lt. Governor, Lt. General (Retd.) Bhopinder Singh, PVSM, AVSM on a day-long visit to Campbell Bay today inspected the permanent shelter sites at Campbell Bay. Shortly after arrival at Campbell Bay, the Lt. Governor visited Joginder Nagar and inspected the North South road, which is under construction by the Border Road Organization. The Lt. Governor visited RPRS permanent shelter site and Govind Nagar permanent shelter site, where he was informed that the construction work of the permanent homes is progressing well. At Car Nicobar, the Lt. Governor also held discussion with the members of the Tribal Council at APWD Guest House at Car Nicobar. During the discussion, the Lt. Governor urged the tribal leaders to take part in the development process of their area and assured them to provide every possible support from the Administration for the overall development of the area.

<http://www.and.nic.in/tuesday.htm>

LG inspects construction of permanent shelters in Nicobar isles: Port Blair, April 21. The Lt. Governor, Lt. Gen. (Retd.) Bhopinder Singh, PVSM, AVSM today inspected the permanent shelter sites located at southern group of islands in the Nicobar District. The Lt. Governor first visited permanent shelter site at Kamorta and Champin in Nancowry, where he was informed that the permanent homes construction works is progressing as per schedule. He interacted with the tribal leaders and directed the authorities that minor modifications as desired by the beneficiaries of the permanent homes must be incorporated in consultation with the beneficiaries of these home so that they are fully satisfied and happy at the time of taking possession of these homes. He directed APWD to expedite the road construction work at Lapang village. Later, the Lt. Governor also held a meeting with the local officers of all the departments at Car Nicobar. He directed them to visit all the remote islands regularly in order to ensure that the people of these isolated areas get all the basic facilities. He directed them to attend to their problems and grievances on priority
<http://www.and.nic.in/sunday.htm>

NDMA, Admn. Discuss threadbare progress on permanent shelter construction: Port Blair, April 25. A detailed meeting on action taken report on the observation of National Disaster Management Authority (NDMA) with special focus on progress on permanent shelter in A&N Islands was held by the Vice-Chairman, NDMA, General (Retd) NC Vij, PVSM, UYSM, AVSM and the Lt. Governor, Lt. General (Retd) Bhopinder Singh, PVSM, AVSM and senior officers of A&N Administration at Raj Niwas here this evening. Speaking on the occasion, General Vij expressed satisfaction over the progress of the construction of permanent shelters in these islands and was of the view that the super structure must be completed with in the scheduled time-frame. In his address on the occasion, the Lt. Governor said that minor modifications such as erecting central wall between each dwelling units of the permanent shelters must be carried out so that the beneficiaries of these homes can feel that they have separate unit of their own and feel satisfied at the time of taking possession of their homes.
<http://www.and.nic.in/telegame.htm>

Livelihoods

Training on management practices on agriculture begins: Port Blair, Apr 11. A 4-day training programme is being conducted by the Central Agricultural Research Institute (CARI), Port Blair in association with Central Soil Salinity Research Institute, Karnal on 'Management practices for improved agriculture in post tsunami scenario' for tsunami-affected farmers of A&N Islands. Altogether 30 farmers from South and Little Andaman and 5 personnel of ActionAid International are attending the training programme, which was inaugurated yesterday by Dr. R.C. Srivastava, Director, CARI. Speaking on the occasion, the Director urged upon the participant farmers to look beyond tsunami and adopt scientific management practices for higher agricultural productivity.
<http://www.and.nic.in/thursday.htm>

SBI-IWC join hand in aid of tsunami affected people: Hut Bay, April 16. A unique programme was organized under the aegis of Inner Wheel Club of Port Blair and State Bank of India in aid of the tsunami affected people, who were provided interest free loans for restoration of their economic

activities, in the post tsunami scenario. Shri D K Podder, AGM, SBI Port Blair was the chief guest of the programme, while Smti Raj Mahajan, Chartered President, Inner Wheel Club presided over the function, which was held at the Panchayat Ghar on Saturday. The chief guest informed that the restoration of livelihood for the tsunami affected people of the area was a joint effort of the SBI and IWC by providing interest free loans to them. He expressed satisfaction over the successful running of their units and advised them to repay the loans regularly to avoid inconvenience at the later stage. Expressing gratitude to the beneficiaries for successfully running their units, Smti Mahajan also urged them to pay back the loan amount so that other needy persons can be provided similar assistance for setting up their income generating assets. She said that any of the borrower, who is in need of financial assistance for improvement of the unit, will be assisted provided he or she is regularly repaying the loan amount. She also briefed about the social activities of IWC in helping the needy people of different areas in the islands.
<http://www.and.nic.in/tuesday.htm>

Puducherry

Residents' fast against land acquisition:

Puducherry: Residents of Pillaichavady, Sinna Kalapet, Periya Kalapet and Kangachettykulam (all in Lawspet Assembly constituency) here went on a token fast at the entrance to the Pondicherry University in Kalapet on Thursday to protest against the Government move to acquire lands for construction of houses for the tsunami-hit families. A release from the Joint Action committee of the residents said later that the administration should give up the move once and for all. They had already been deprived of their lands for Pondicherry

University, Pondicherry Engineering College and Navodaya Vidyalaya and for a few other projects. There was also deprivation of their lands for a private hospital project. If the administration should persist in its efforts to take over the remaining lands, there would be little resources for their livelihood. The Government should construct residential tenements for fishermen in their own localities, as such arrangements would ensure that they carried their routine activities.

<http://www.hindu.com/2007/04/20/stories/2007042003330500.htm>

Kerala

Tsunami rehabilitation: Kerala-Maharashtra sign MoU:

Thiruvananthapuram, April 17: Kerala and Maharashtra on Sunday night signed an agreement on the rehabilitation of tsunami-hit people in the southern State, as per which the latter would implement a Rs 12-crore package. As per the MoU signed in the presence of Maharashtra Co-

operation and Rehabilitation Minister Patangrao Kadam and Kerala Revenue Minister K P Rajendran, Rs 9 crore would be spent for building houses in Alappad area of Kollam district and Rs 3 crore for improving facilities at Karunagapally Taluk Hospital.

<http://www.hindu.com/thehindu/holnus/002200704170312.htm>

About Us

TRINet, the Tsunami Rehabilitation Information NETWORK was set up in March 2005 as a response to the broad information requirements in the state of Tamil Nadu for tsunami rehabilitation and reconstruction phases to help in sharing information between different groups working on various aspects in the different districts of the state.

Initiated by SIFFS: South Indian Federation of Fishermen Societies, ICSF: International Collective in Support of Fishworkers and the Bhoomika Trust, the members of TRINet include the NGO Coordination and Resource Centre (NCRC) in Nagapattinam, Auroville Tsunami

Rehabilitation Knowledge Centre and the Kanyakumari Rehabilitation Resource Centre (KRRC), Nagercoil, and the information Centres in Chennai, Tuticorin, Tirunelveli and Kerala set up by SIFFS.

*This is the twenty-second the **TRINet Newsletter** since it was launched in July 2005. TRINet brings out a weekly e-digest of news on tsunami rehab in all the affected countries as well as a Tamil newsletter called "**Alayathi**", aimed at the communities in Tamil Nadu. If you would like to be on our mailing list, please write to us at info.trinet@gmail.com. Please visit www.trinet.in for updates.*

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