Pro-Poor Sanitation and Water Initiative in Kathmandu Valley

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Water for Asian Cities Programme

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Nepal

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Water for Asian Cities Programme

- A collaborative initiative between UN-HABITAT, Asian Development Bank and the Governments of Asia which was launched at the 3rd World Water Forum in March 2003 aims at capacity building and creating the enabling environment for promoting pro-poor investment in water and sanitation to support Millennium Development Goals.

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WAC Programme Countries

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Integrated Water and Environmental Sanitation Programme in Peri-urban community in Kathmandu Valley

Programme Objectives

- Demonstrate how a community can work with water supply entity to acquire safe water and adequate sanitation that meet its needs
- Demonstration of pro-poor connection charges and tariffs
- Increase community awareness on environmental sanitation
- Creation of job opportunity for poorest of the poor
- Enhance capacity of the local authority, WATSAN Users Committee and the community

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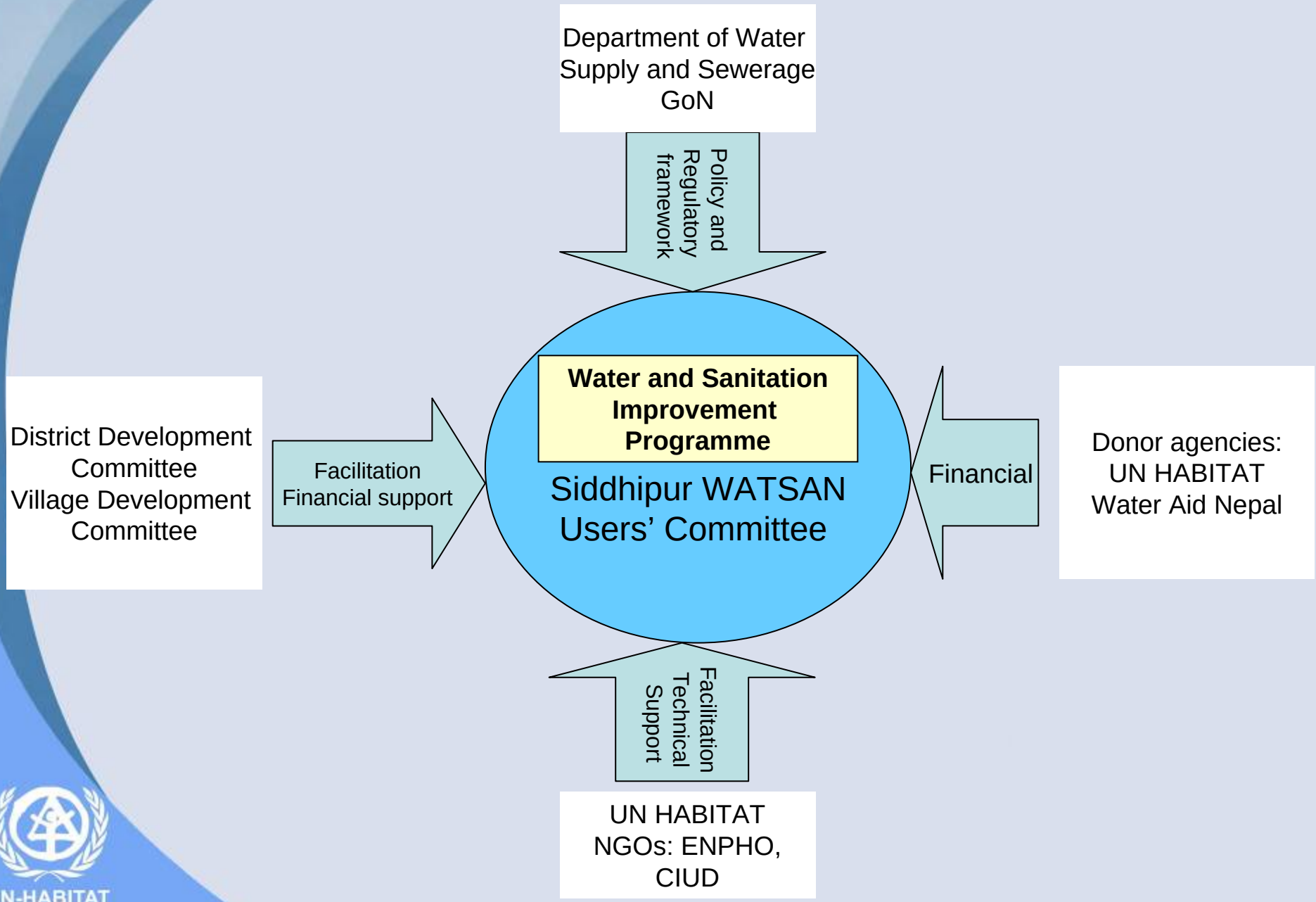
Multi-stakeholder Fora



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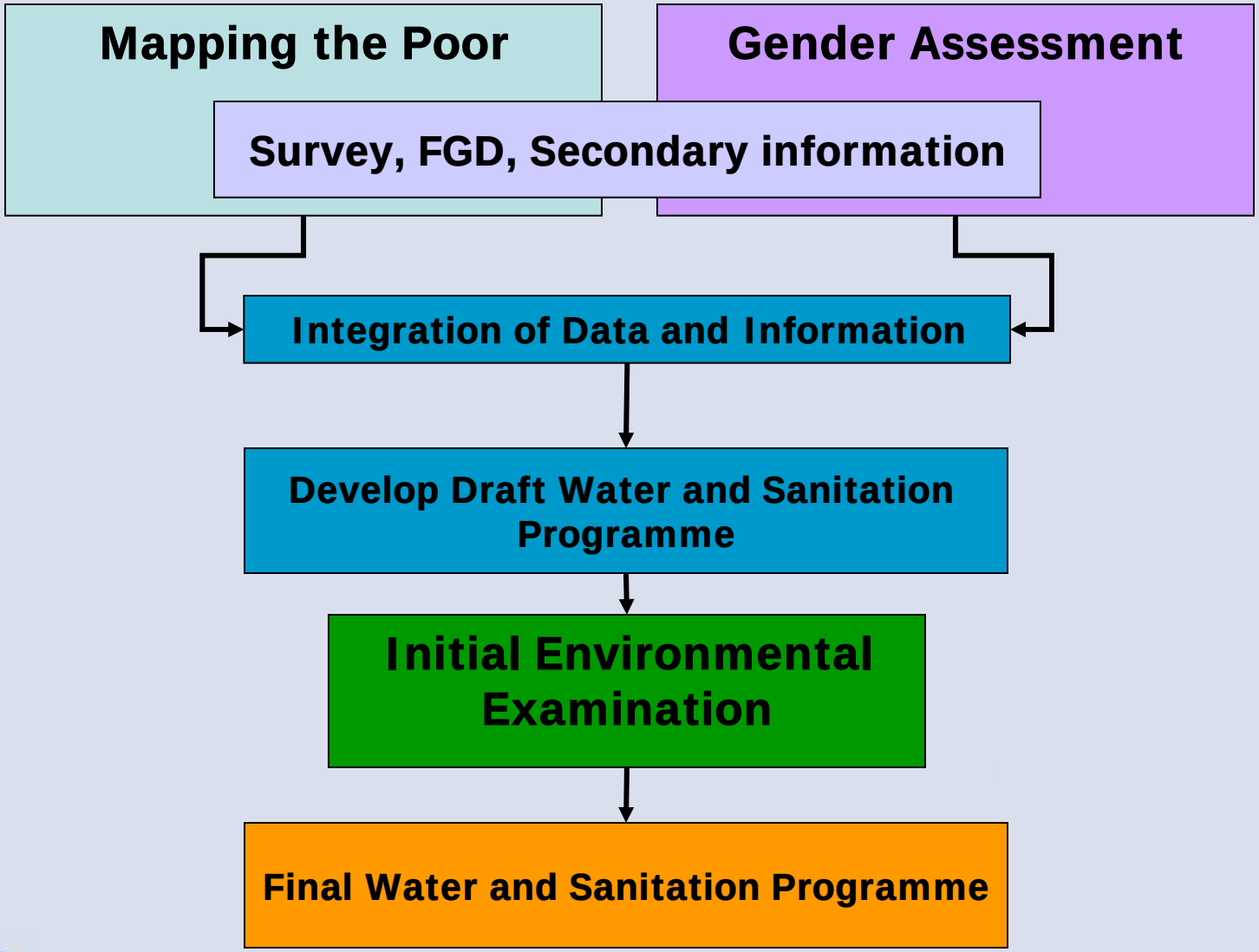
Mapping the poor



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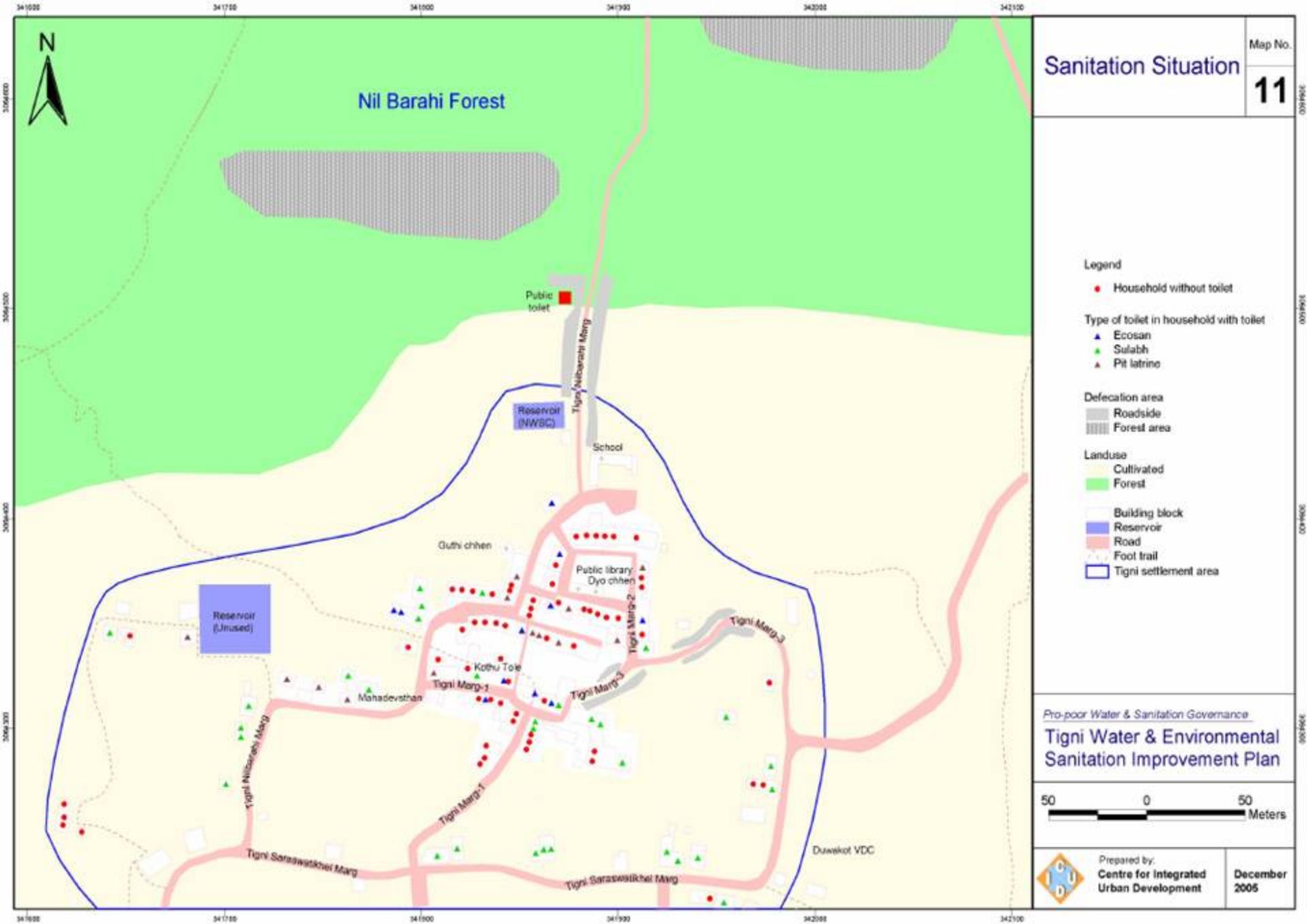
N
Nil Barahi Forest
Public toilet
Tigni Nilbarahi Marg
Reservoir (NWSC)
School
Guthi chhen
Public library
Dyo chhen
Reservoir (Unused)
Tigni Marg-2
Tigni Marg-3
Kothu Tole
Tigni Marg-1
Mahadevsthan
Tigni Nilbarahi Marg
Tigni Marg-1
Tigni Saraswatikhel Marg
Tigni Saraswatikhel Marg
Duwakot VDC
Sanitation Situation
Map No.
11
Legend
Household without toilet
Type of toilet in household with toilet
Ecosan
Sulabh
Pit latrine
Defecation area
Roadside
Forest area
Landuse
Cultivated
Forest
Building block
Reservoir
Road
Foot trail
Tigni settlement area
Pro-poor Water & Sanitation Governance
Tigni Water & Environmental Sanitation Improvement Plan
50
0
50
Meters
Prepared by:
Centre for Integrated Urban Development
December 2005

Water Supply System

Intake

Transmission line 3.3 km

Tube settler : 6x3 m = 2.5km pipes

Slow sand filter 3 units (each 6.6x12m)

Chlorination unit

Q :10lps

Reservoir : 250 m3

Overhead tank : 50 m3

Distribution network : 9 km

Public and private taps 1000

Total Cost : USD 2.15 million (USD30/pe)

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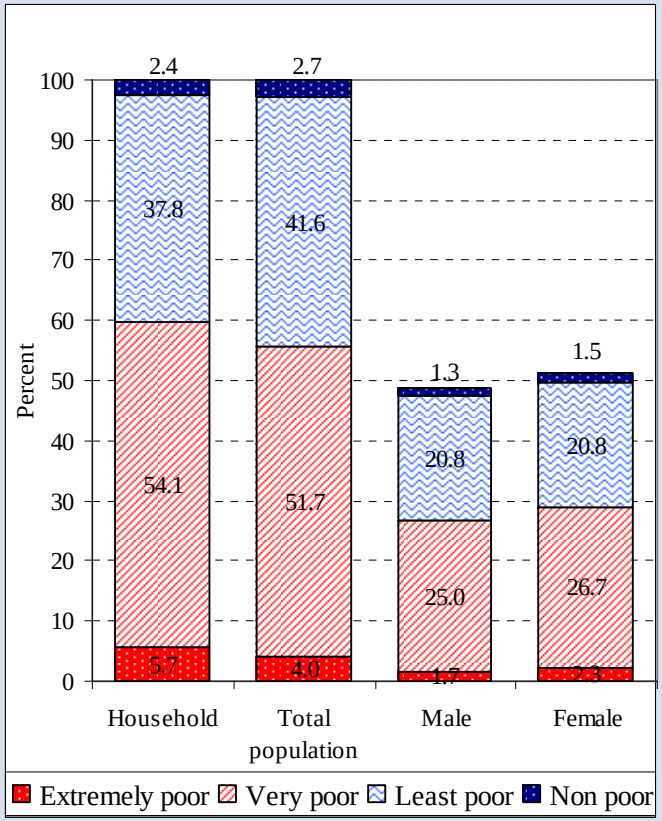
Pro-Poor Tariff & Approach for Sustainability

- Tariff based on principles of sustainability, affordability, equity and water conservation
  - Private Taps
    - Up to 7 m3 : Rs. 75 (USD 1.1)
    - 7 to 10 m3 : Rs. 12 /m^3
    - 10 to 15 m3 : Rs. 15/m^3
    - > 15 m3 : Rs. 20/m^3
  - Community Tap (5 to 10 HHs)
    - Up to 6 m3 : Rs. 50
    - 6 to 10 m3 : Rs. 10 /m^3
    - > 10 m3 : Rs. 20/m^3



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Sanitation Improvement

- Promotion of on site systems such as Ecological Sanitation, Communal Toilets, Improved pit latrines and Septic Tanks
- Community Led Total Sanitation Campaign
- Rehabilitation and Improvement of Drainage
- Introduction of Fecal Sludge Management System
- Household composting & recycling for SWM

CLTS approach

Transect Walk

Flagging

Social Mapping

Shit Mapping

Shit intake calculation

Calculation of the amount of feaces entering a person's mouth:

Eg. a leg of a housefly carries 0.001kg or 1 gm of feaces. Assume a housefly sits on a meal three times a day, than the total amount of feaces entering that persons mouth can be calculated as: 1g X 6 legs X 3 times a day X 300 days in a year = 5kg).

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Community Commitment to Stop Open Defecation

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ECOSAN Toilet

Size of chamber : 0.35 m3 each

Urine collection tank 100 lit

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Plastic Collection

"*suiro*"
Monthly collection of plastic

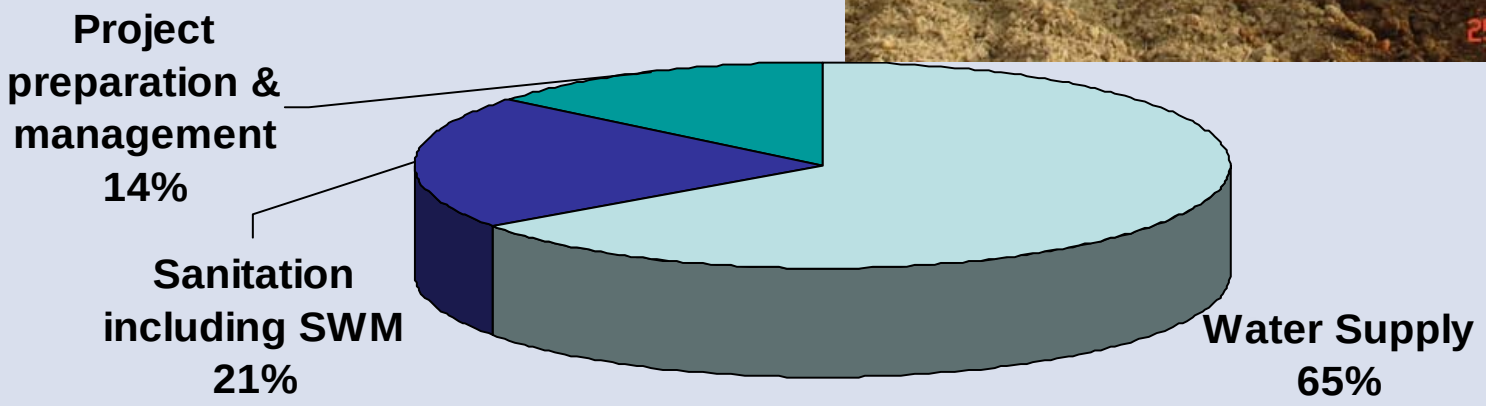
Capacity Building & Public Awareness

- Capacity Building of local WATSAN Users Committee
  - Setting up of WSUC field office
  - Operation Water Supply and sanitation system
  - Setting up of pro poor water tariff structure
  - Exposure visits
  - Trainings
- School-level & Community WATSAN education
- Community Awareness Programs

Project cost & Community Contribution

- Total project cost: US$ 485,000
  - UNHABITAT, WAN, ENPHO contribution: 60%
  - Community Contribution: 40%

- Forms of Community contribution
  - Land for treatment plant
  - Labour
  - Partial cost of infrastructure



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Sustainability of the Programme

- The community were involved from the initial stages
- The water tariff system developed on the basis of cost recovery basis.
- Technologies are simple and very low O & M.
- Household have to pay tariff for Biogas

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Conclusion

- Succeed in demonstrating innovative approaches on pro-poor Water & Sanitation
- Demonstration of integrated approach in sanitation improvement supports in creating awareness about the technologies at policy to implementation level.

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