

Ecosan Capacity Development Workshop



Success Story of Ecosan Services Foundation, India

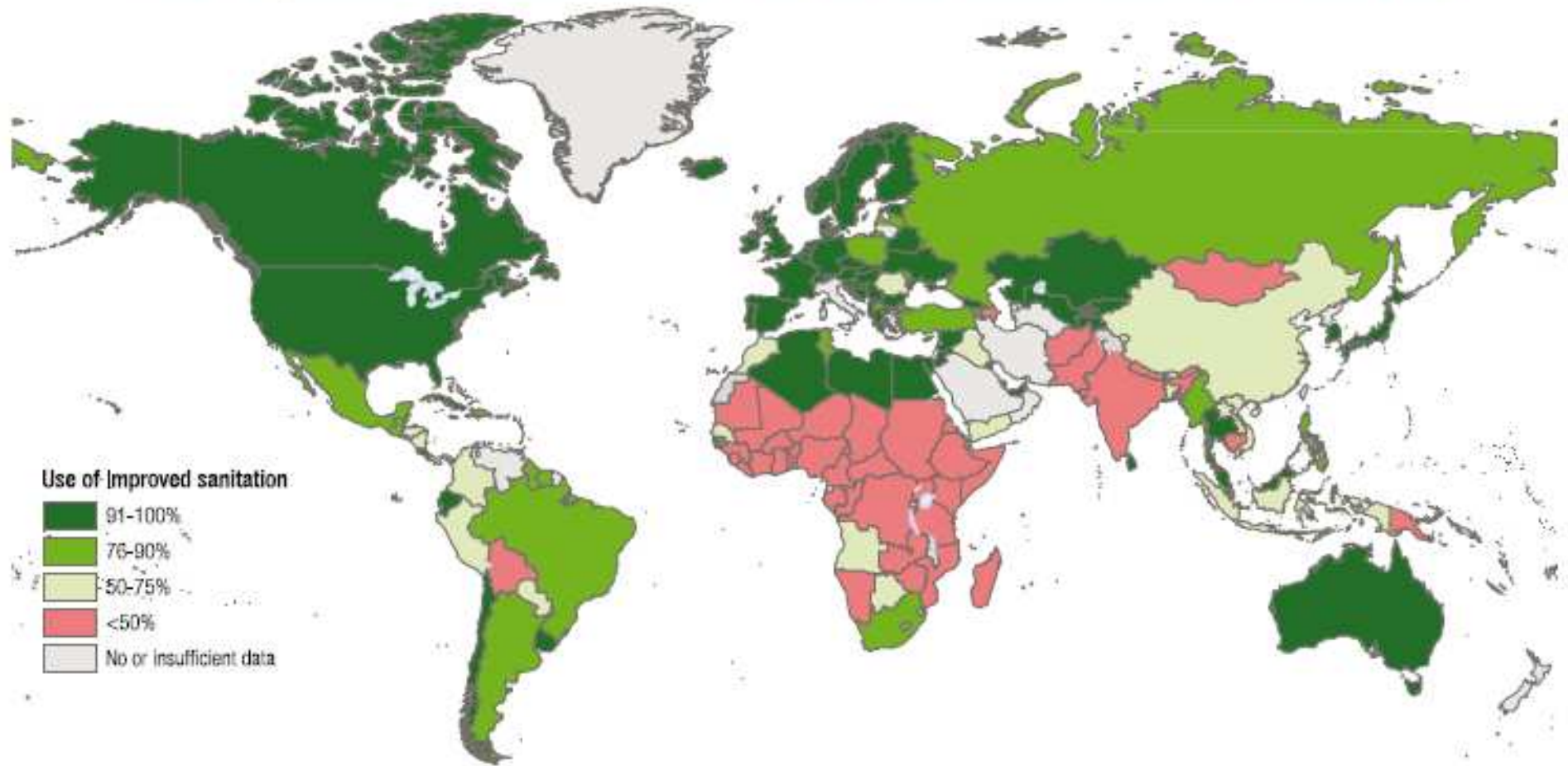
(1)

Mrs. Pradnya Thakur
Head Projects
Ecosan Services Foundation
Pune, Maharashtra, India



Global Sanitation Status

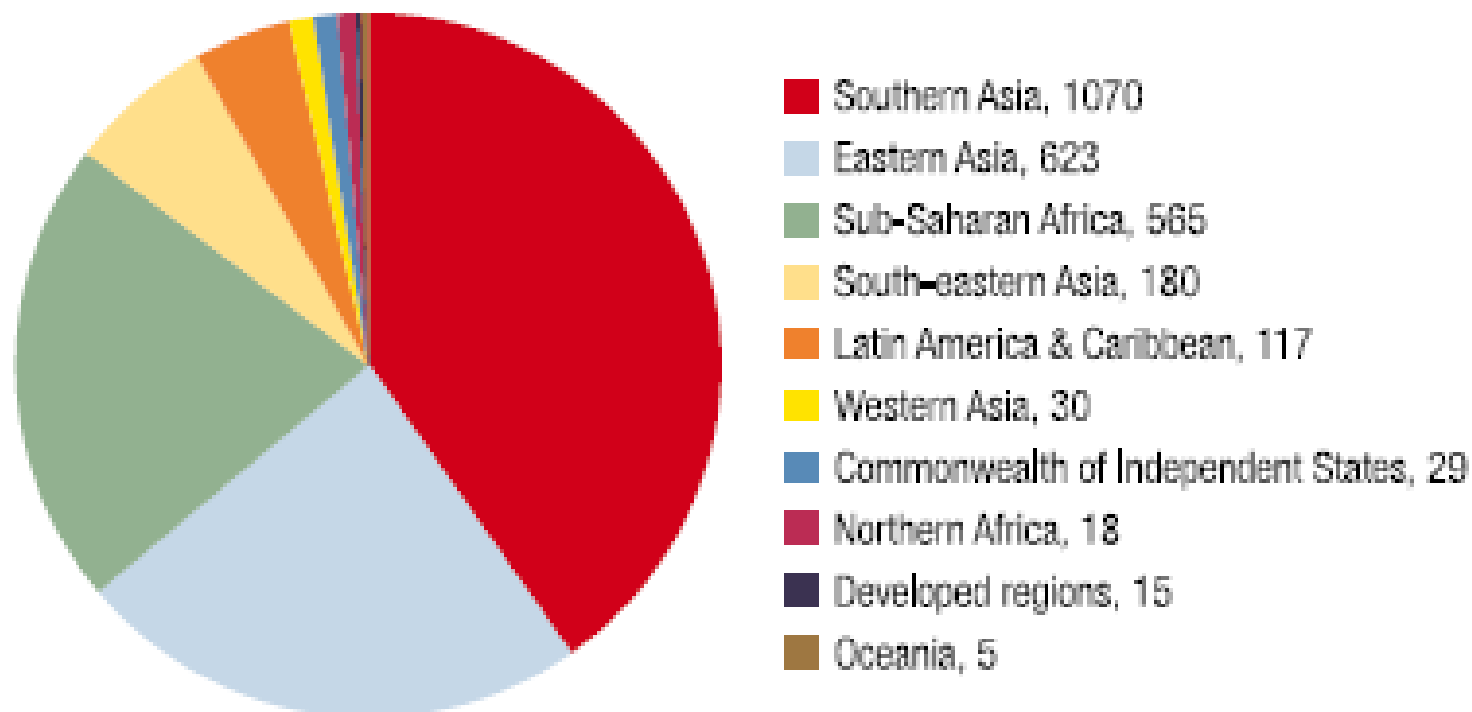
Use of improved sanitation facilities is low in Sub-Saharan Africa and South Asia



Source: JMP report 2010

Asian Sanitation Status

2.6 billion people – 72% of whom live in Asia – do not use improved sanitation facilities



Daily increase in population to be served to meet the MDG target on water supply and sanitation in 2015

Country	Projected Population (10 ³)	MDG Attained Coverage (%)		Daily Increase Needed In People To Meet The MDG Targets	
		Water Supply	Sanitation	Water Supply	Sanitation
Afghanistan	41,401	no data	no data	-	-
Bangladesh	168,158	86	62	8,000	7,000
Bhutan	2,684	no data	no data	-	-
India	1,260,366	84	56	33,000	82,000
Iran	79,917	96	92	3,000	3,000
Maldives	416	100	no data	> 50	-
Nepal	32,747	85	56	2,000	2,000
Pakistan	193,419	92	69	9,000	11,000
Sri Lanka	22,293	86	60	1,000	1,000
South Asia	1,801,401	86	60	64,000	115,000

Sanitation Issues of India

- Health and Dignity
- Sanitation to 665 million people
- Rapid urbanization- increased generation of waste water
- Increased gap between generation and treatment of waste water
- Decrease in fresh water availability per capita



Need of huge funding US\$15BN for CST

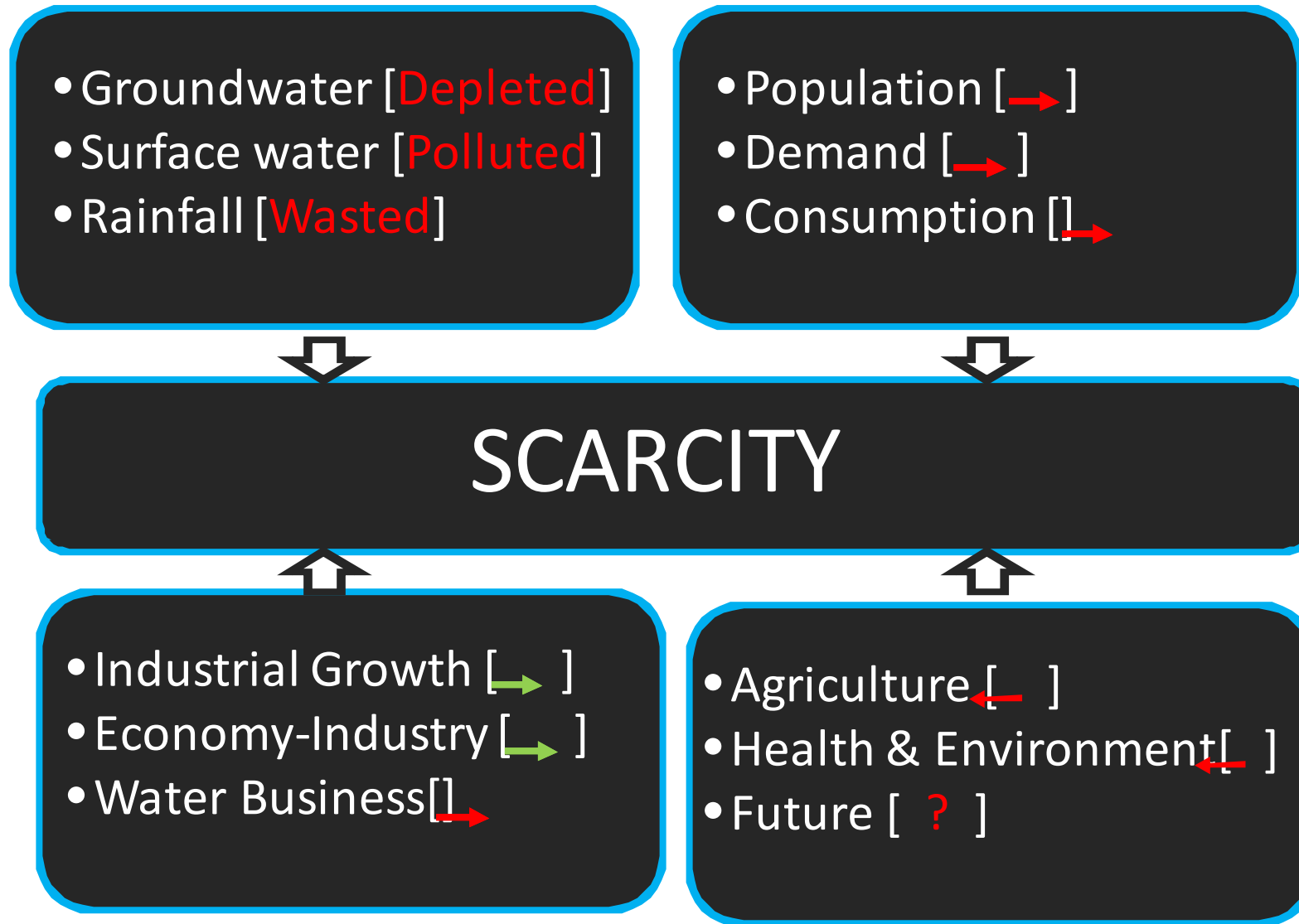
Cultural Diversity in **INDIA**

States in India 33,
Languages spoken around
30

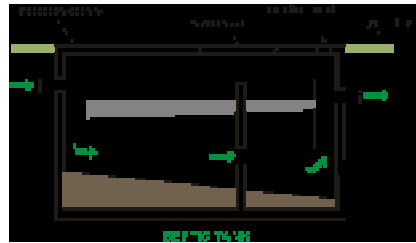


ne Land of cultural
diversity embossing unity
and people symbolizing
passion for oneness and
freedom.....

The Indian situation



Crisis of Sanitation in India

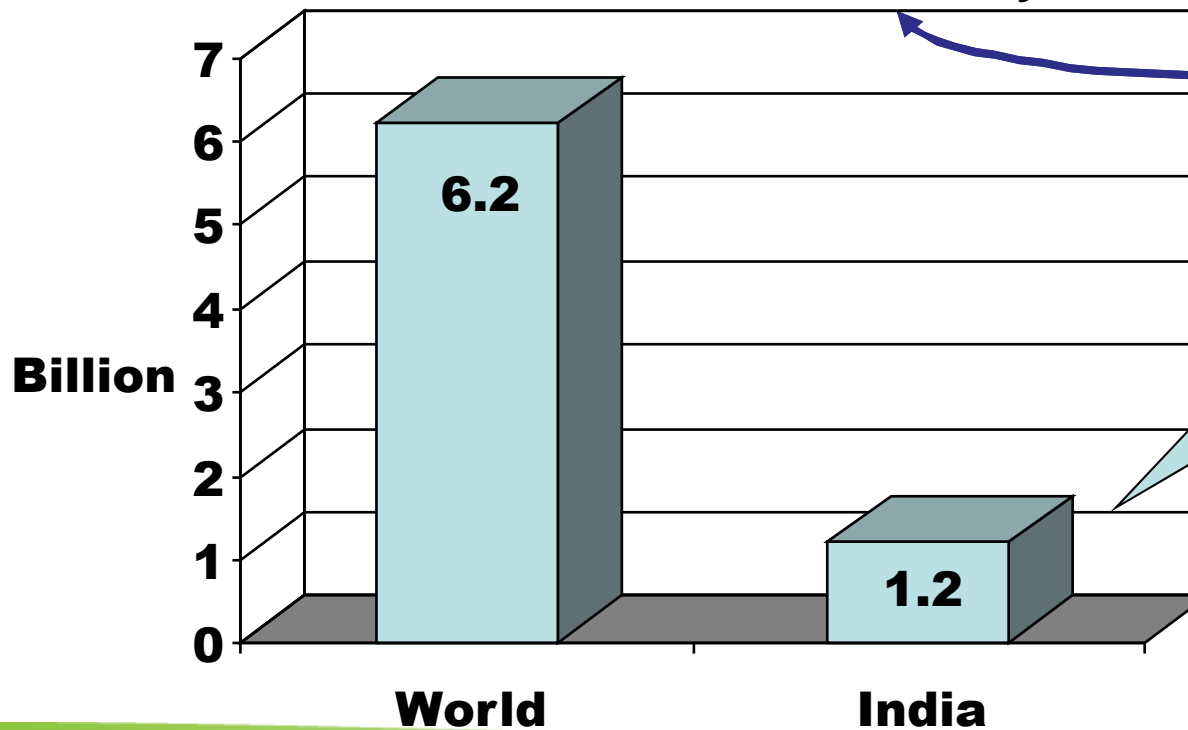


Septic Tank 34%



STP 36%

Connectivity



Safe Sanitation Access
Urban 62 %
Rural 36 to 40 %

- Mostly septic tanks
- Open sewers
- No treatment

National Sanitation Policy

Key Issues :

- Poor Awareness
- Social and Occupational aspects of Sanitation
- Fragmented Institutional Roles and Responsibilities
- Lack of an Integrated City-wide Approach
- Limited Technology Choices
- Reaching the Un-served and Poor
- Lack of Demand Responsiveness



Components of National Urban Sanitation Policy

- Awareness Generation
- Institutional Roles
- Monitoring & Evaluation (M&E), and regulatory arrangements.
- National Urban Sanitation Policy

How to meet the Challenges...

- Supporting the development of:
 - **innovative ecological sanitation systems**
 - the **institutional and economical framework** for implementation
 - the **acceptance** of reusing recycled nutrients in agricultural applications
- Providing capacity building, knowledge dissemination, experience sharing and implementation support.
- Networking with different like minded organisations.

Coming together....and exchanging ideas



International Workshop on Ecosan in 2005



International conference on Ecological Sanitation
organized by Indian Water Works Association

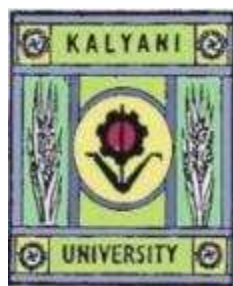
Felt strong Need of 'Experts' who know and understand Sustainable Sanitation

Formation of ESF in 2006



About ESF

- Ecosan Services Foundation (ESF) a 'section 25' non profit company has been founded in 2006 jointly with seecon international gmbh, Switzerland and with the support from GTZ, Germany
- Small core team, but flexible network structure with experts and partners from all over India and the world
- Lead organization in IESNI network



Technologie-Transfer-Zentrum an der Hochschule Bremerhaven

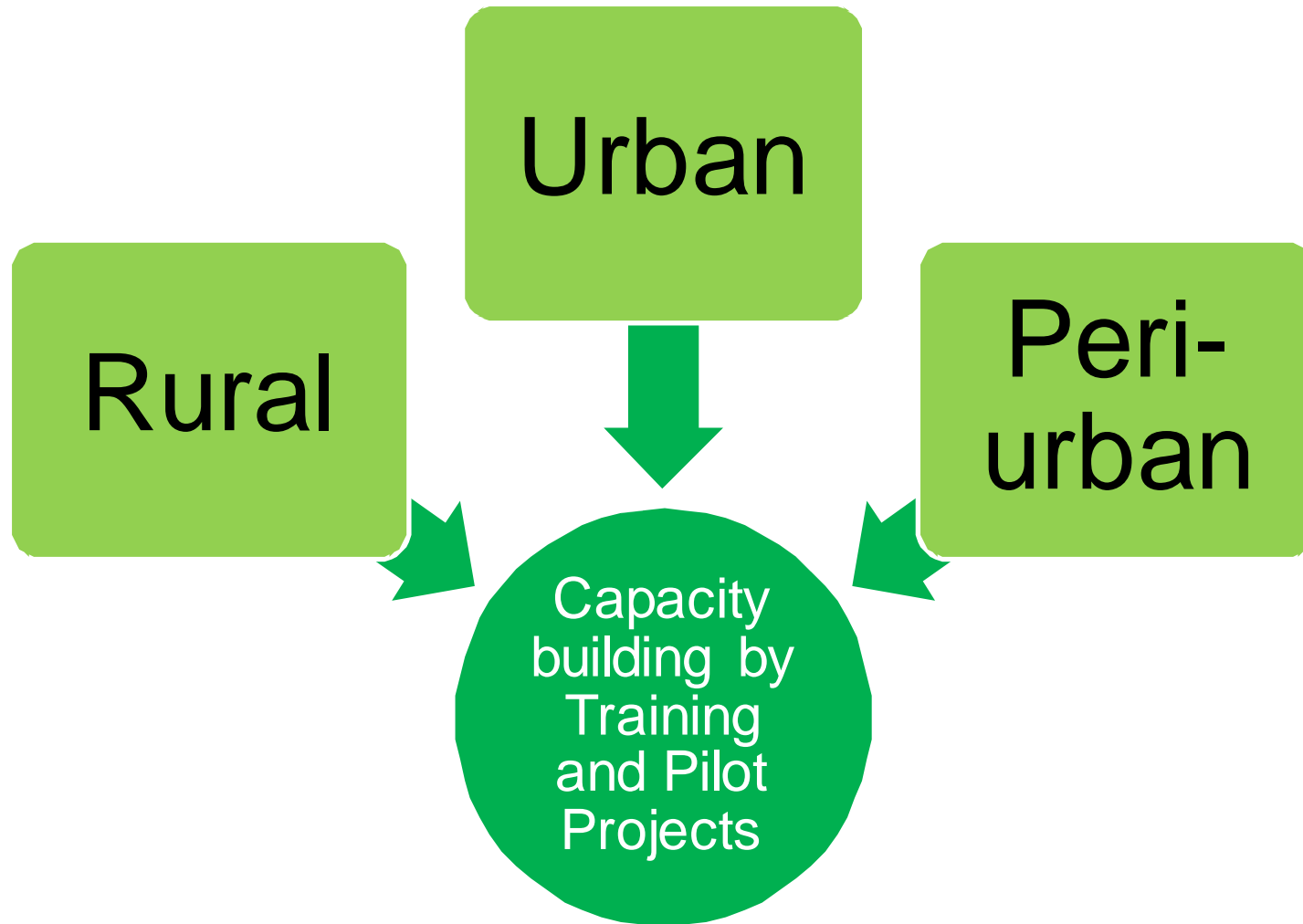
Vision

ESF aims to transform into a sustainable key resource centre as a leading knowledge hub in sustainable sanitation and water management.

Objectives

- Developing sustainable organizational structure and processes.
- Strengthening our position in capacity development through training, piloting and demonstration, awareness raising, R & D and coaching in new enterprises.
- Strengthen our networking platform with national and international experts in the sector.
- Open dissemination of knowledge through face-to face as well as IT enabled services for institutions and individuals.
- Quality Management and organizational learning to highlight best practices in the sector.

About ESF

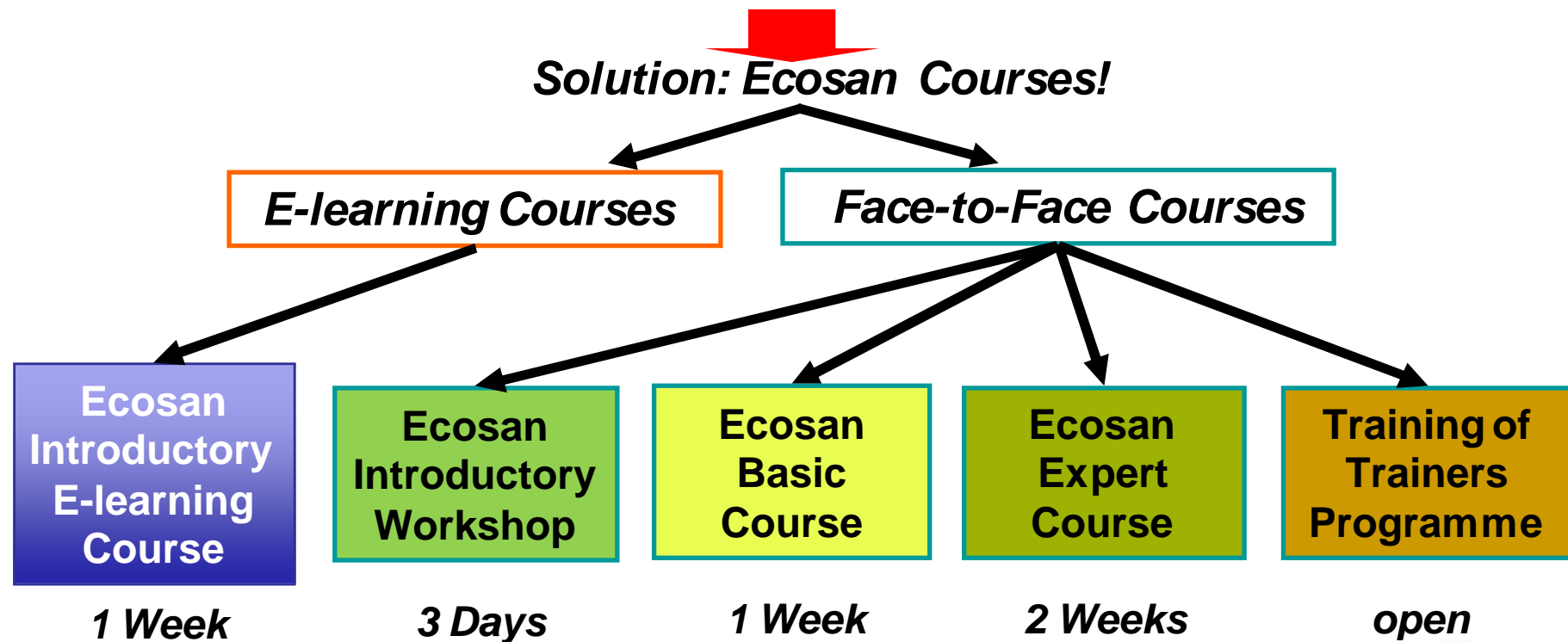


Capacity building activities

Why Ecosan Courses?

Many successful ecosan projects raised awareness and acceptance for innovative ecological sanitation solutions worldwide.

But: Significant lack of qualified *local* personnel to implement projects at the grassroots level.



Teaching Methods

(1) Lectures



National and International team of Ecosan experts delivered lectures

Teaching Methods

(3) Group Works



Interactive group works from assessing drawbacks of conventional sanitation systems to the designing and planning of real ecosan projects.



(4) Interactive Role Plays



By playing different roles, participants get an insight into the requirements of different stakeholder groups to a sustainable sanitation system.

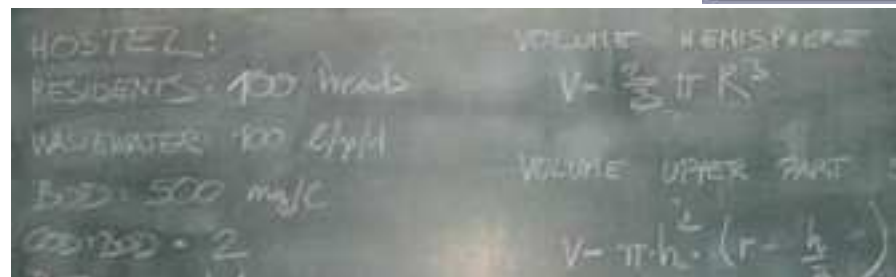
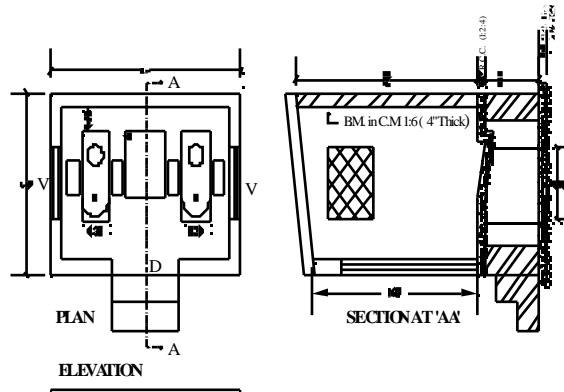
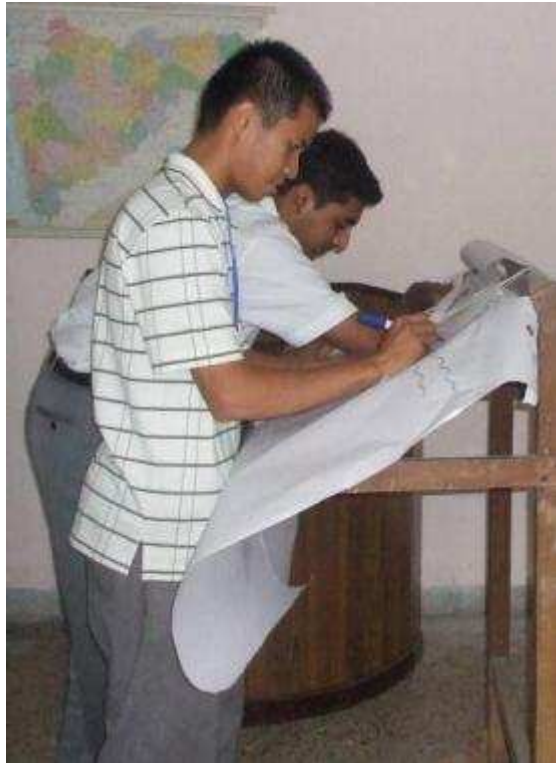
(5) Field Trip to Different Ecosan Projects



By visiting ecosan projects in a two-day field trip, participants see working ecological sanitation systems in practice, which is very important for their thorough understanding of the concept.

Teaching Methods

(6) In-depth Technical Exercises & Lectures



In the second week of the course, participants learn how to implement various ecosan technologies, such as Urine Diverting Dehydration Toilets, Biogas Systems & Greywater Management Systems.

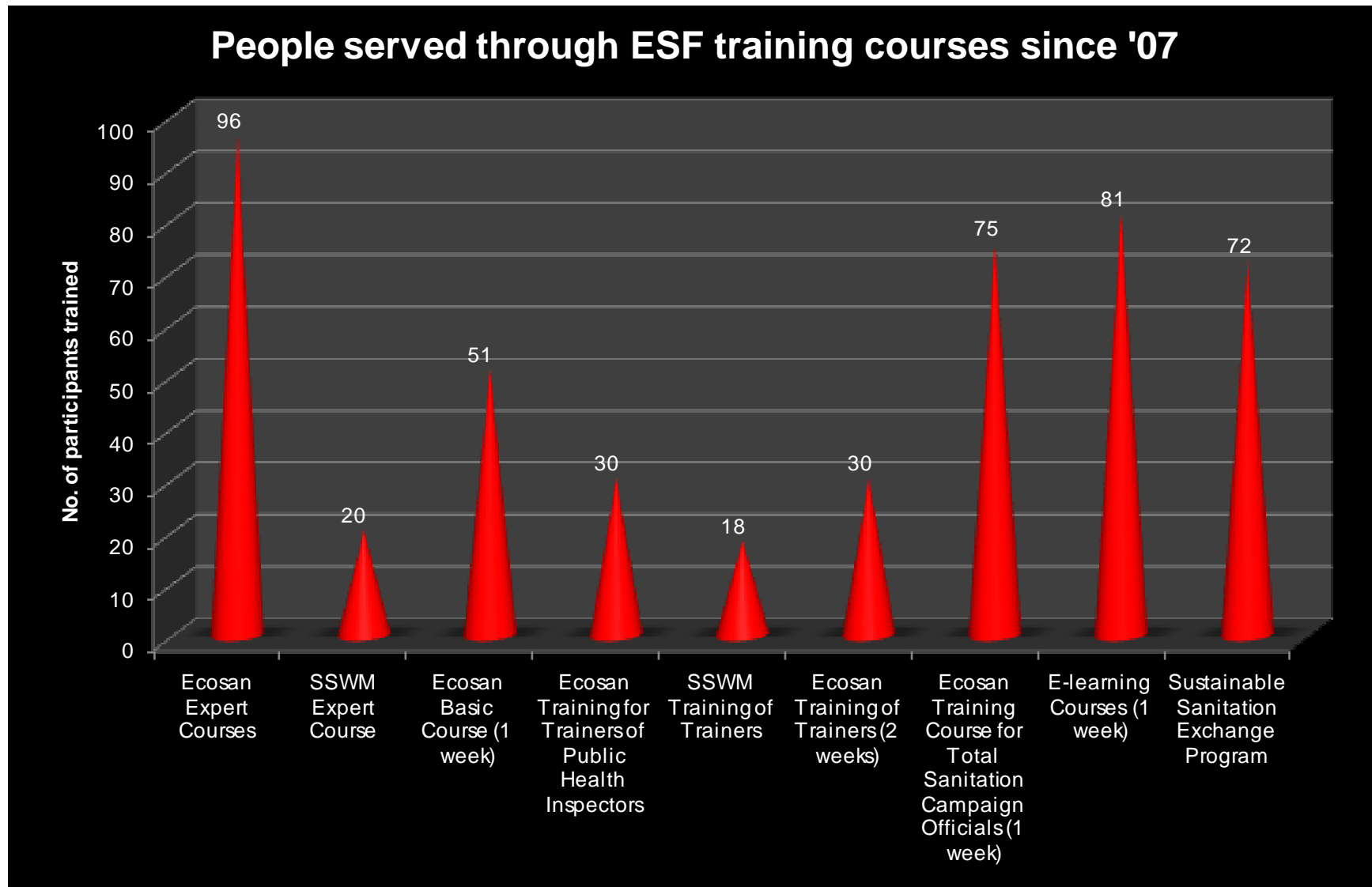
Teaching Methods

(7) Own Ecosan Project Development



In the second week of the course, participants develop an outline of an real ecosan project including the project background, decision making process, a holistic reuse concept and technical alternatives.

No. of Experts Developed during Training Program



Other Capacity Building Activities

School Sanitation Exchange Project



Other Capacity Building Activities

Capacity building of city Managers



Awareness Generation through workshops and conferences

Policy makers

NGOs and Professionals

Educational Institutes

Users

Technologist

Builders, developers and manufacturers

Financial Institutions

Mass awareness through media

Projects

Completed Project

Name of the project	Type of project	Number of users served	Reuse potential	
			WW	Urine
Adarsh Vidyaprasarak Sanstha's College of Arts & Commerce, Badlapur	Decentralized Wastewater Treatment System	2600	WW	Urine
			8m ³ /day	300L/day



Completed Project

Name of the project	Type of project	Number of people served	Reuse potential
Shree BaleshwarAnudanit Primary and Secondary Ashram School, Sarole Pathar	Decentralized Wastewater Treatment System	500	Grey water
			12m ³ /day



Completed Project

Name of the project	Type of project	Number of people served	Reuse potential
KamaliniKuteer resort, Near Pune	Decentralized Wastewater Treatment System	30	WW
			5m ³ /day

Name of the project	Type of project	Number of people served	Reuse potential
Oasis resort, Pune	Decentralized Wastewater Treatment System	700	WW
			14m ³ /day



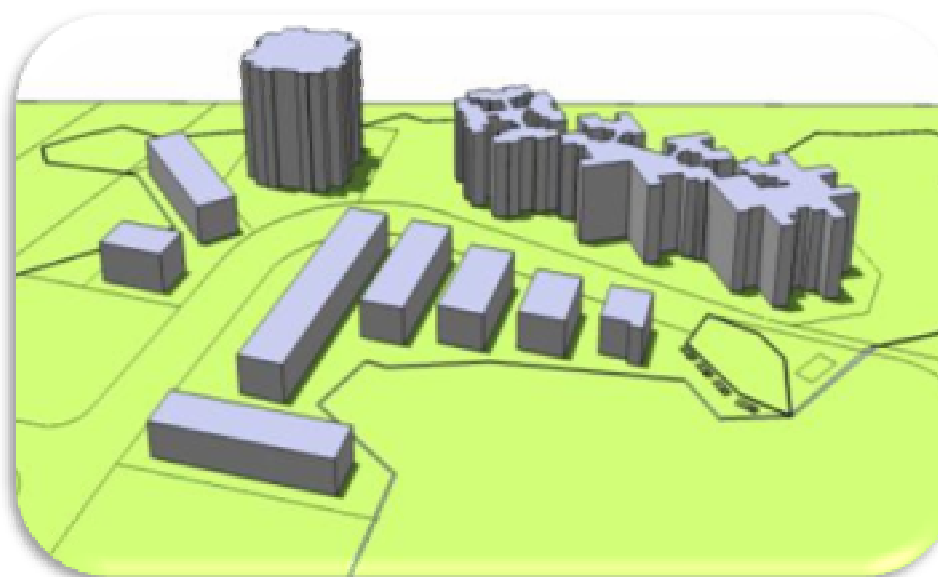
Ongoing Project

Name of the project	Type of project	Number of people served	Reuse potential
Eco – village project, Katewadi, Baramati To be implemented at: <ul style="list-style-type: none"> • Primary school; • Hanuman temple; • Bus stand. 	Sanitation and water management systems	<ul style="list-style-type: none"> • Primary school: About 520 • Hanuman temple: 200; • Bus stand: 600 	WW
			<ul style="list-style-type: none"> • Primary school: 860L/day; • Hanuman temple: 5500L/day; • Bus stand: 5400L/day



Ongoing Project

Name of the project	Type of project	Number of people served	Reuse potential
Housing complex, Thane	5 Decentralized Wastewater Treatment Systems in the whole complex	About 1300	WW
			74 KLd, 79 KLd and 15 KLd at Desai ; 18KLd and 139 KLd at Khidkali.



Sustainable Sanitation and Water Resource Management

Eco Office Pune:

1. Water conservation: Installed dual flush system and water saving urinals.

Approx. 300 l/day water conservation due to dual flush system and water saving urinals

1. **Roof top rainwater harvesting:** Harvesting of roof top rainwater in storage tank and percolation to ground water recharging will complete till end of June 2010

Approx. 5000Lit water is expected to store and 50,000 lit of water to be recharge to ground during monsoon period.



Feasibility Study

Name of the project	Type of project	Number of people served
Pandharpur Town – Sanitation plan with GIS study	Techno economic feasibility Study for Sanitation and Sewer management	More than 1 million



Achievements

Achievements

Workshops

- No. of people served - around **2000**

Conferences

- No. of people served - around **300**

Trainings

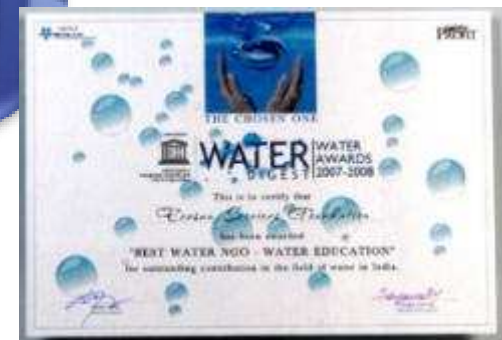
- No. of People served – around **500**

Projects

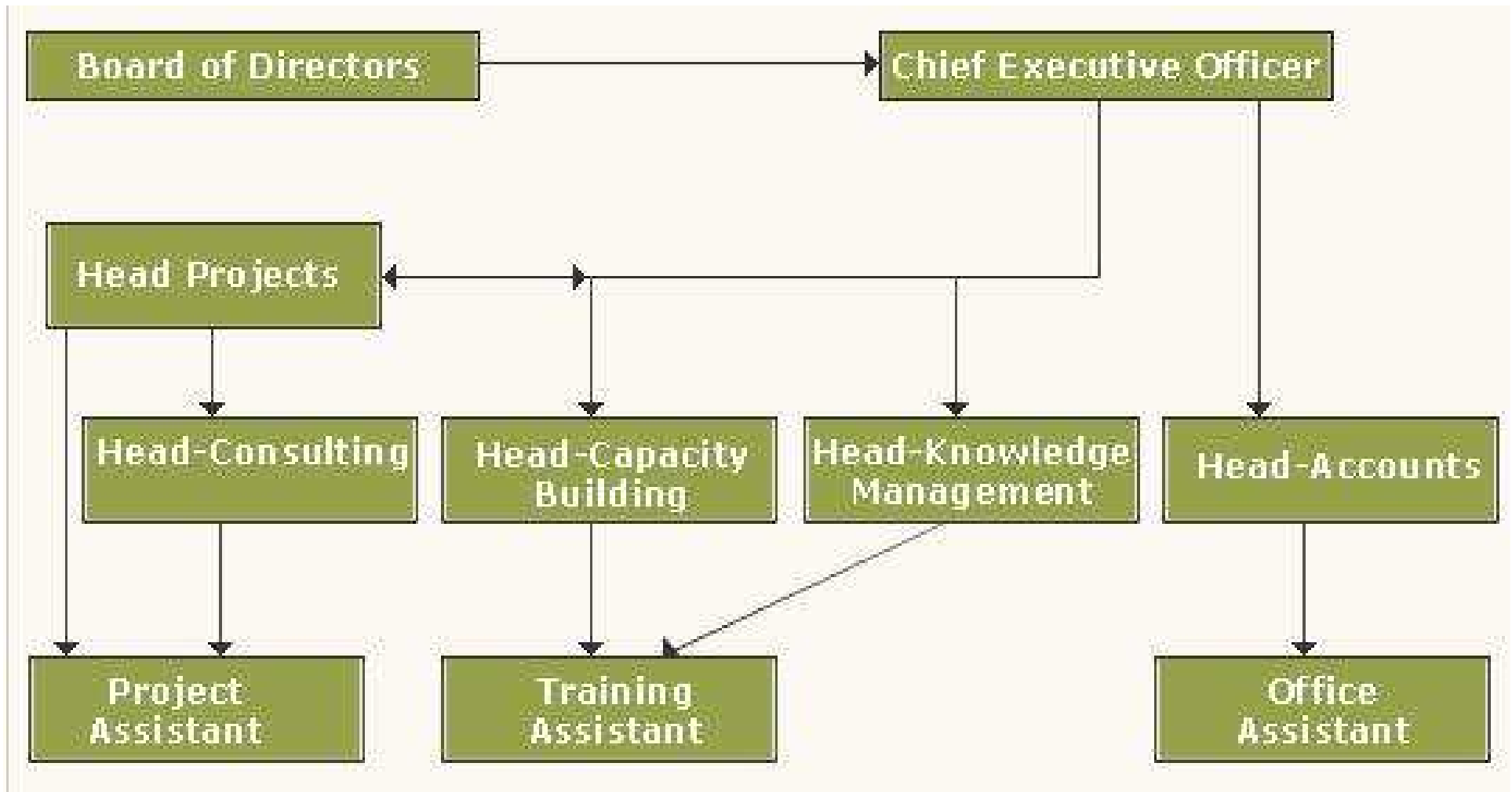
- Other projects **10,000**
- Pandharpur Project **More than 1 million**

Achievements

ESF scoops Water Unesco Award – Water Education



Organisation chart



Thank you from Team of ESF !



Ecosan Capacity Development Workshop, Nairobi, September 27th September, 2010



Contact:



Ecosan Services Foundation

1002/42, "Vishwa Chandra",
Rajendra nagar, Pune -411 030.

Web: www.ecosanservices.org

Email: ecosan@ecosanservices.org

Ph: +91 20 64 000 736