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Presentation outline



- Introduction of HANDS
- Some facts and finding from field- A glance on research component
- HANDS Interventions in WASH sector
- Key challenges / Food for thought???

HANDS Introduction



- **The organization life cycle started in 1979, founded by Prof. A. G. Billoo (Sitara-e-Imtiaz).**
- **After 33 years HANDS has evolved, as one of the largest Non Profit Organization of the country with integrated development model.**
- **HANDS has a network of 29 offices across the country and has access to more than 25 million population of nearly 42000 villages / settlements in 29 districts.**
- **HANDS strength is 15 volunteers Board Members, >1400 full time staff and more than 01 Million community based volunteers of 3531 medium and small size organizations and > 8000 other Community Groups**

HANDS Introduction



- **These offices are supported by network in 03 provinces that is Punjab, Sindh, and Balochistan.**
- **HANDS is certified by Pakistan Centre for Philanthropy (PCP) and tax exempted by Income tax department of government of Pakistan.**

Vision & Mission



Vision

Healthy, Educated, Prosperous and
Equitable Society

Mission

HANDS mission is for improving health,
promoting education, alleviating poverty and
developing social institution for community
empowerment.

HANDS Researches



- Baseline survey to ensure water and sanitation services in urban slums of Gadap Town. (with the support of Water Aid & HSBC)
- Baseline survey for the Provision of Water, Sanitation and Hygiene services in 500 schools of Gadap Town
- Water Poverty Index of Gadap Town
- Developed WASH profile of 23 districts of Sindh Province

Urban Sanitation



- At Household level - Major sources of water is piped water (93%)
- Tanker and bore holes were also identified as source of water
- Stomach pain, Vomiting, Diarrhea, Headache, Sore throat and Hepatitis are reported as disease in children and adult population related to water and sanitation
- 71% respondents of HH survey reported that they boil water and 23% said they treated water with cloth.

Urban Sanitation



Observation Household Inside	%
Trash within household	26.4
Feces in household premises	23.2
Flies in household	36.2
Dustbin Availability	55.1
Open feces in dustbin	18.1
Animal Feces in the household	9.8
stagnant water	18.5

Observation Household Outside	%
Trash Near Household	38.8
Open Drainage Near Household	21.7
open defecation near household	18.5
Stagnant water	29.3

Water Poverty Indexing in Slums area of Karachi



Union Council	Resource	access	environ ment	capacity	Use	WPI
4	0.56	0.65	0.1	0.38	0.25	0.39
6	0.25	0.45	0.1	0.75	0	0.31
7	0.31	0.6	0.1	0.38	0.13	0.30

Environmental and Sanitation status in 500 schools of Gadap Town



Variables	Government (%)	Private (%)
Open defecation	17	4
Pile of trash within the premises	13	3
Pile of trash in surroundings	19	9
Teachers trained on Health & Hygiene	8	10
Existence of Toilet facility	62	85
Functional toilets in number of schools	33	48
Toilet separate for Girls	30	59
Dustbin available in toilet	4	40
Hand washing facility available	5	53
Availability of soap at hand washing facility	2	47



HANDS Integrated Approach Water Sanitation And Hygiene

Millennium Goal/Water Rights



The UN Resolution

- The need to provide the people safe drinking water and sanitation was strongly advocated by the UN Resolution A/HRC/RES/15/9. The Legal basis of these Rights was also clarified: “the human right to safe drinking water and sanitation is derived from the right to an adequate standard of living and inextricably related to the right to the highest attainable standard of physical and mental health, as well as the right to life and human dignity.”
- UN Resolution adopted by the Human Rights Council* 15/9 Human rights and access to safe drinking water and sanitation

Work Approach



• **HANDS WASH Strategy**

- Area assessment
- Selection of Union Council
- Support to develop technical and funds request documents
- Provision of grants/ material to extend WASH services
- Community led water services
- Facilitation and monitoring
- Holistic approach for Union Council

Contribution in WASH By HANDS



Drinking Water

Tube Well

- HANDS established 25 tube wells
- during different WASH projects in
- Sindh Province



Rehabilitation Of Water Course

- 234 water courses rehabilitated by HANDS under Cash for Work project .

Achievements in WASH



Ceramic Water Filters

- HANDS developed its own model. Till March 2014 distributed 15326 ceramic water filters in different areas of Sindh, Punjab and Balochistan to disaster affected community with the support of local and international donors.



Achievements in WASH



Drainage

- HANDS constructed 12345 Rft open and covered drainage under various WASH projects.



Covered drain



Open drain

Achievements in WASH



- **Hand Pumps**

12000 Hand pumps have been installed in different parts of Sindh, Punjab and Balochistan for disaster affected communities



Achievements in WASH



Drinking Water Storage Tanks

- HANDS till date constructed 13211 Underground, On ground and overhead Drinking Water Storage Tanks to under privileged community.



Hand Wash Renovation

HANDS has constructed/renovated 673 hand wash facility in different schools thus benefitting average 582 students per school.



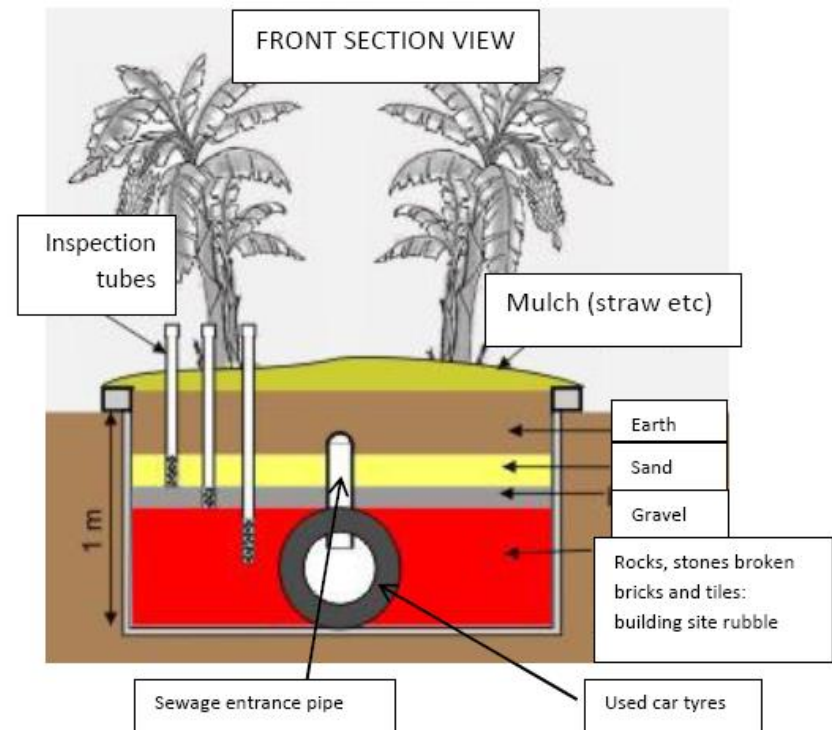
Achievements in WASH



Bio Septic Tank

Bio Septic Tank (BST) is a closed system of treating black water of toilet.

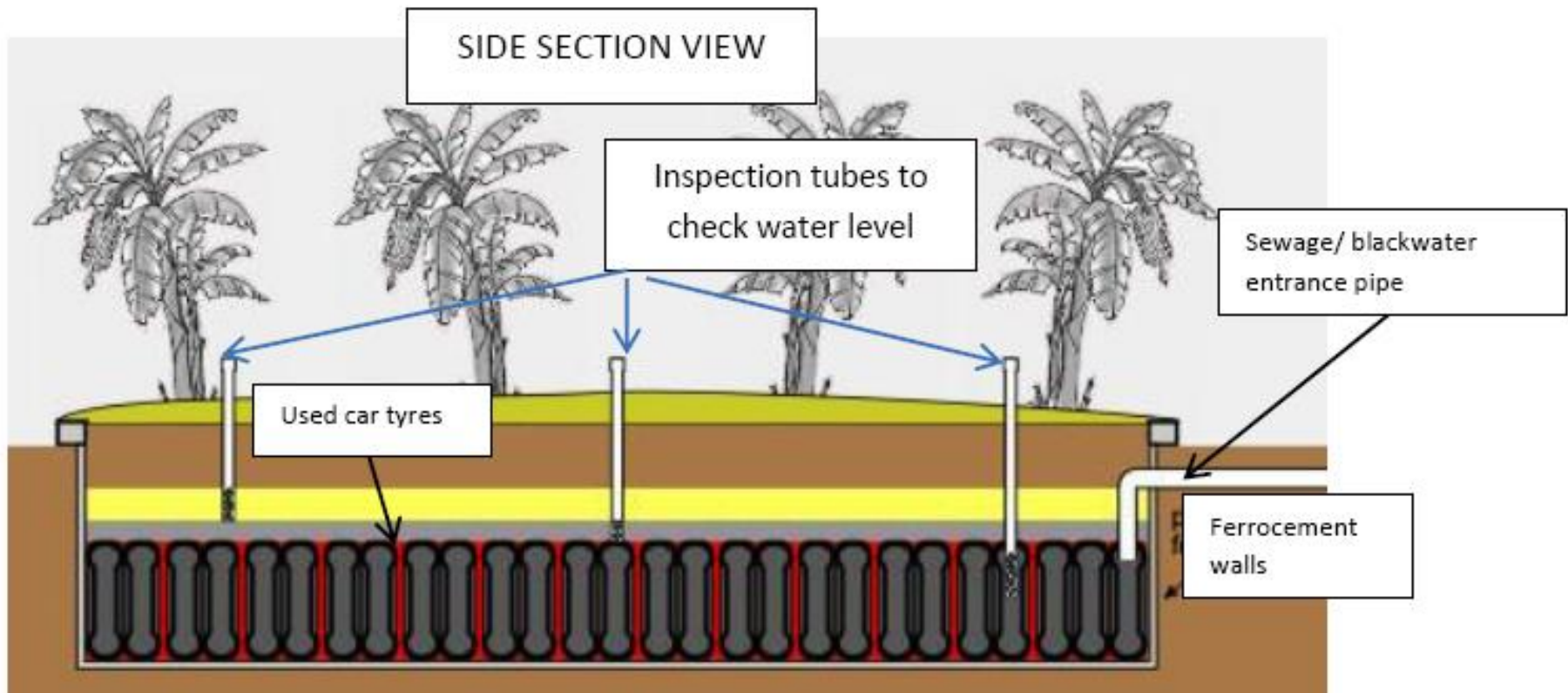
HANDS have constructed a bio septic tank in Makli, Thatta and other bio septic tank is under construction at Gadap.



Achievements in WASH



Bio Septic Tank

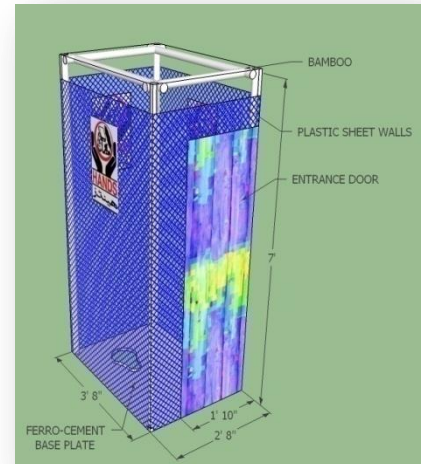


Achievements in WASH



Emergency/Transitional Latrine

- More than 5000 Emergency/Transitional Latrines installed in different flood/rain affected areas of Sindh, Punjab and Balochistan.



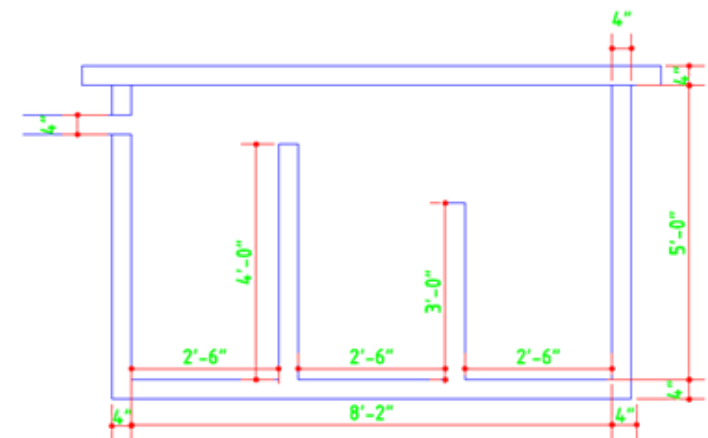
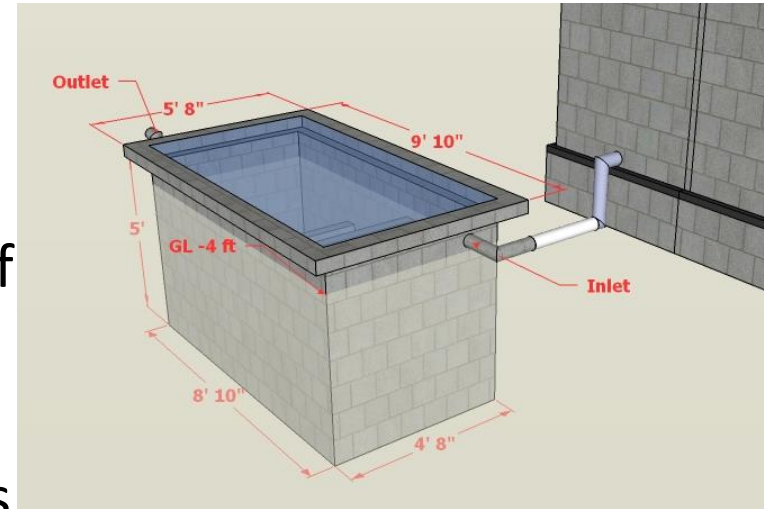
Achievements in WASH



Septic Tank

Septic tanks provides a no. of important function through a complex interaction of physical and biological process.

HANDS has constructed 3000 septic tanks in district Matiari, Jamshoro, Shikarpur and Jacobabad.



Septic Tank

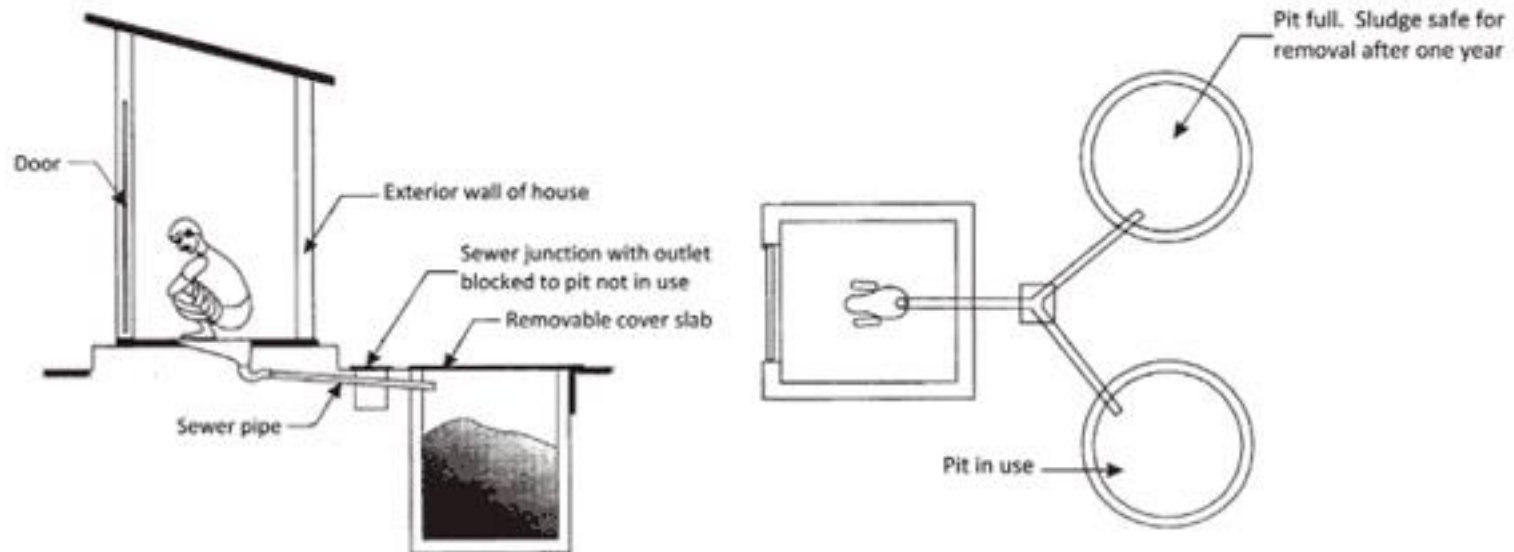
Achievements in WASH



Soak Pit

Soak pit is a covered porous walled chamber that allows water to slowly soak into ground.

HANDS has constructed a number of twin soak pit in areas where ground water table is low.



Impact on Community



Drinking Water Facilities

- Communities have access to the potable water at their door steps.
- The social cohesion and awareness among the people increased.
- The sense of responsibility and ownership created.
- Work Load of Rural women decreased
- Time of Rural Women, Men and Children Saved

Impact on Community



Sanitation & Hygiene

- Improved environment and cleanliness.
- Health epidemic breakouts decreased.
- Expenditure on health related problems reduced.
- Achieved Improvement in quality of life especially of women and children.
- Promoted safety in food handling by safeguarding against food contamination.
- Healthy environment created in the community.

Challenges



- Managing sewage during displacement
- Current practice
- Cost range
- Environmental impact
- Design challenge?
- Cost saving potential



After 6 months in the
Sindhi sun...

\$90 / unit

Note: this picture is
replicated across
thousands of
villages where
similar latrines built.

Lesson: we can do
better than this!



Key Questions and Issues



- Quantity and source of timber & impact
- Durability
- Can we reduce the unit cost / latrine?
- And durability
- Cost of each element of latrine must be considered

Sanitation- Challenges



Poorly designed
overflow from septic
tanks

A common sight all over
Pakistan

A serious public health
problem has been
created, not resolved.



Summary of Sanitation issues



- Walls / superstructure: find low cost and environmentally sound alternatives
- Latrine slabs: research lower cost alternatives
- Innovative options: other – research and testing needed
- Scrutinize unit costs
- Measure environmental impacts



Another example of current urban sewage treatment design. These pipes are connected to latrines within the compounds. The drain leads to the local river but is usually blocked.



Water supply



- Household water treatment options
- Efficacy of pure sachets / aqua tabs?
- How to sustain water treatment
- Innovations and alternatives
- Research, testing and building evidence base

Key issues in water treatment



- Pure sachets & aqua tabs are the most common – but what evidence of efficacy?
- Why not promote household or community water treatment systems that last?
- Emergency and early recovery require different innovations and approaches
- Both should offer good value and where possible lasting solutions

Hygiene



- Review of overall expenditure as % response
- Hygiene kits @ £10 / family = high cost
- £1.4m for 1m people displaced
- And kits only last a week or two.. So then what?
- What is the purpose and value of soap?
- Options for increasing access to soap
- CLTS in emergency and recovery response

Why Hand Wash With Soap?



- 42% reduction in diarrhea risk
- 23% reduction in ARI risk
- 40% reduction in NM
- Nutrition-protects from TE
- Pandemic 'flu
- Cholera, dysentery, trachoma



Critical factors



- Link WASH to other community vulnerabilities such as malnutrition and food insecurity
- Understand the role of trees as food and fodder source, as well as DRR, economic opportunities
- Treat water and sewage waste as an opportunity – not a hazard



Thanks!