



PRESENTATION ON PONDS RENOVATION IN UNAKOTI

Presented by Shri Abhishek Chandra, IAS, District Magistrate & Collector

PROFILE OF THE DISTRICT

Basic Information about Unakoti District



| | | |
|-------------------------|---|-------------------|
| Total Population | ❖ | 2,98,644 |
| Male | ❖ | 1,51,066 |
| Female | ❖ | 1,47,578 |
| SC Population | ❖ | 64,430 (21.57%) |
| ST Population | ❖ | 68,264 (22.86%) |
| Rural Population | ❖ | 2,60,188 (87.12%) |
| Urban Population | ❖ | 38,456 (12.88%) |
| Population Density | ❖ | 435.72 per sq. km |
| Sex Ratio | ❖ | 967 |
| Literacy Male | ❖ | 91.89 % |
| Literacy Female | ❖ | 84.69 % |
| Literacy Total | ❖ | 88.29 % |
| Total geographical area | ❖ | 686.97 sq. km |

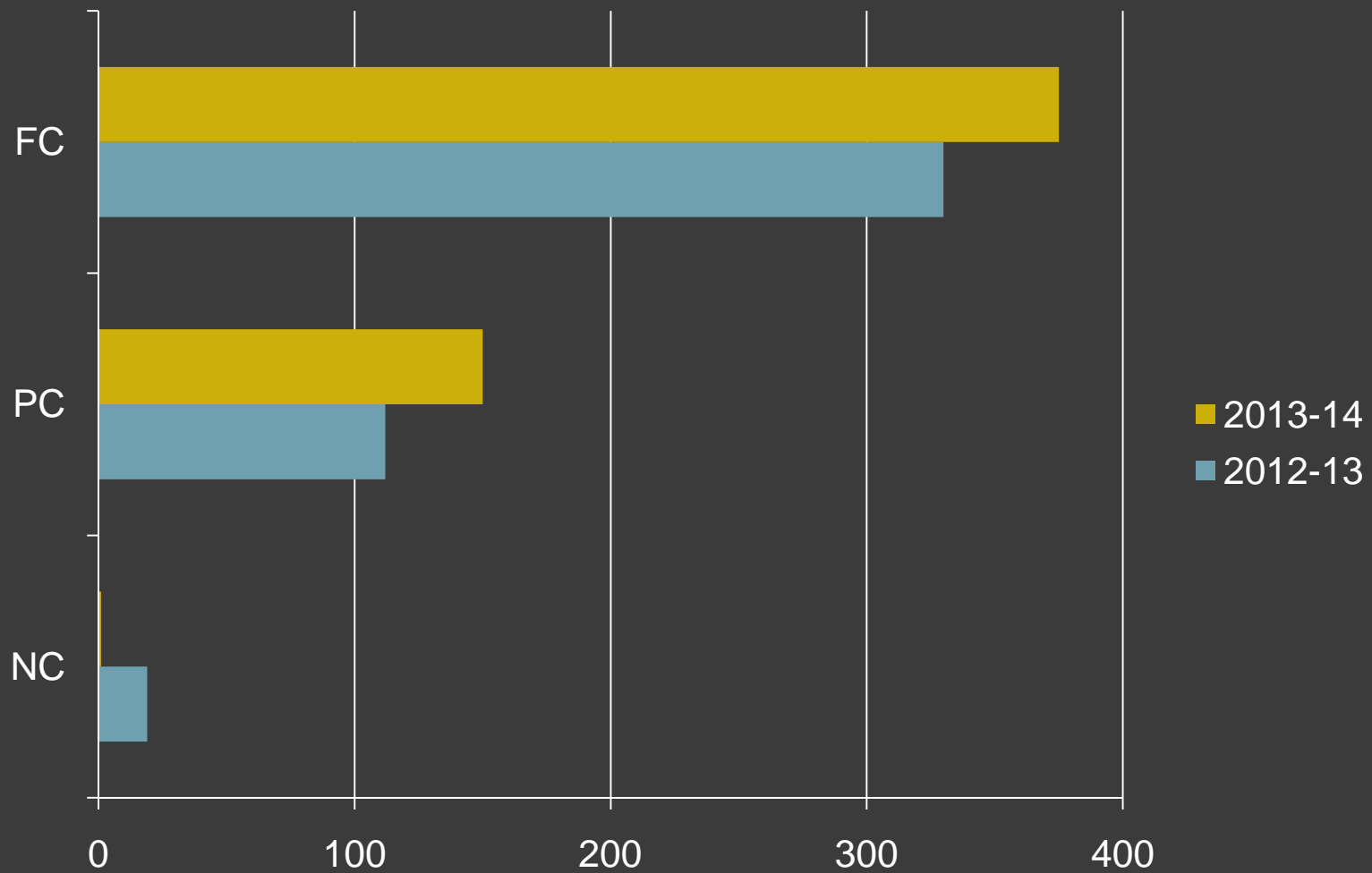
GROUND WATER

- Auto-flow of 100 to 3000 litres per hour is found mainly in the central part of most of the synclinal valley of Tripura.
- Large number of shallow tube-wells have been constructed at depth of 30 m to 60 m.
- In areas fringing the hills (within 2km to 4km), water table generally appear deep and sediments fine.
- The shallow aquifer level are normally located within a depth of 50m below ground level (some time, it may be at 12-20m depth as in valley)
- the deeper aquifer occur between the depth ranges of 50m to 200m.
- The water level becomes highest between the month of August and start declining from January to April.

STATUS OF DRINKING WATER

| Component | FY 2012-13 | During this year (203-14) |
|---------------------|----------------------|---------------------------|
| NC (None Covered) | 19 Nos. habitations | 1 No. habitation |
| PC (Partly Covered) | 112 Nos. habitations | 150 Nos. habitations |
| FC (Full Covered) | 330 Nos. habitations | 375 Nos. habitations |

STATUS OF DRINKING WATER



TYPES OF WATER SOURCES

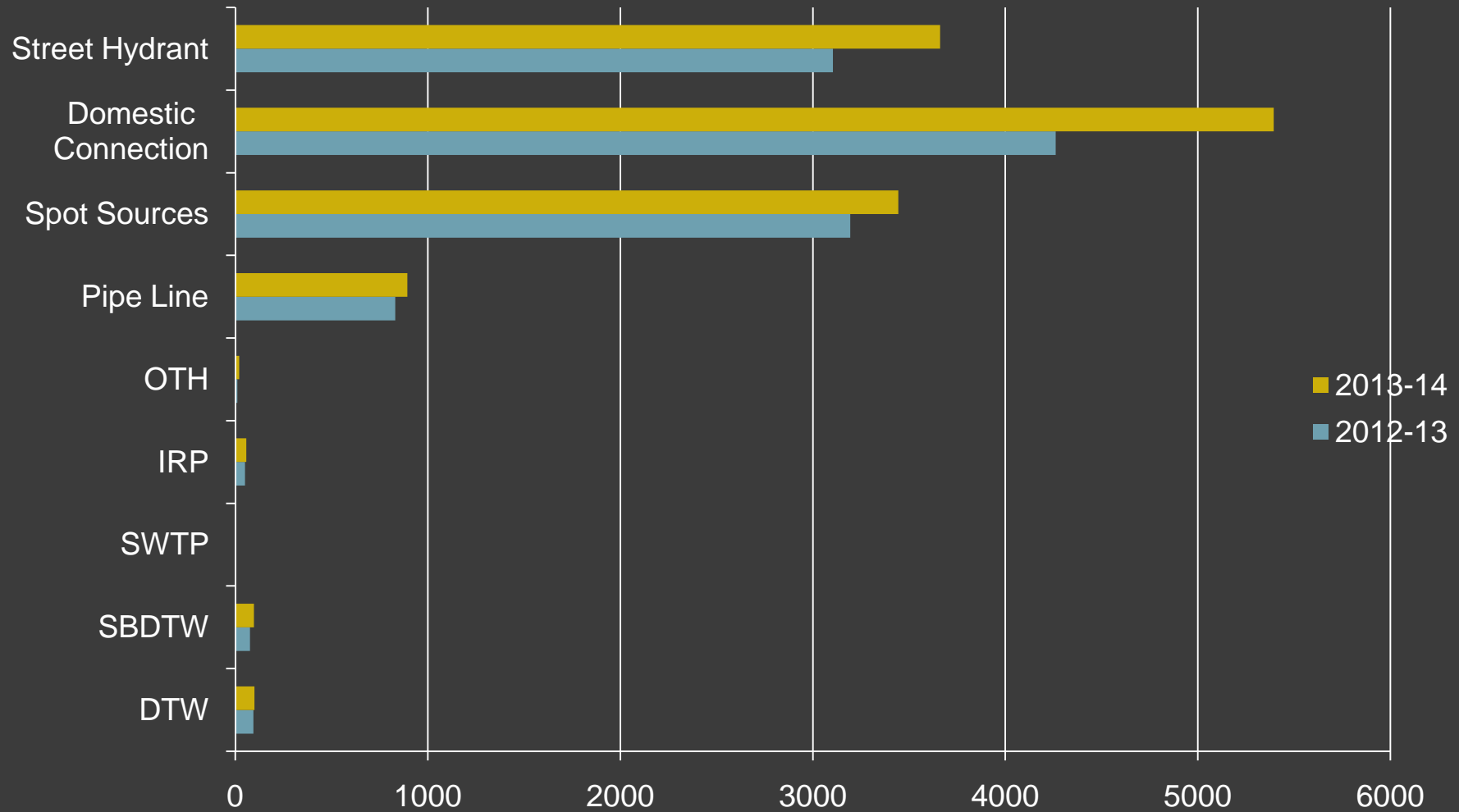
- Cheeras - 98 Nos.
- Rivers – 2 Nos.
- Wells – 643 Nos.
- Ponds/pokurs – 1053 Nos.
- Rainfall – 2859 mm
- Cannel – 1 No.

STATUS OF WATER SUPPLY SCHEME

Schemes implemented in the Rural and Urban areas in drinking water / creation of water sources in Unakoti.

| Name of Scheme | Rural | Urban | Total |
|--------------------------------------|-----------|-----------|-----------|
| DTW | 91 Nos. | 8 Nos. | 99 Nos. |
| SBDTW(Small Bore Deep Tube Well) | 90 Nos. | 7 Nos. | 97 Nos. |
| SWTP (Surface Water Treatment Plant) | 2 Nos. | 2 Nos. | 4 Nos. |
| IRP (Iron Removal Plant) | 54 Nos. | 3 Nos. | 57 Nos. |
| OHT(Over Head Tank) | 13 Nos. | 8 Nos. | 21 Nos. |
| Pipe Line | 756.78 KM | 136.5 KM | 893.28 KM |
| Spot Sources | 3232 Nos. | 212 Nos. | 344 Nos. |
| Domestic Connection | 603 Nos. | 4791 Nos. | 5394 Nos. |
| Street Hydrant | 3383 Nos. | 278 Nos. | 3661 Nos. |

STATUS OF WATER SUPPLY SCHEME



TARGET TO PROVIDE DRINKING WATER FACILITY IN ALL HABITATIONS

- The Nodal Department Drinking Water Sanitation
- 20 IWMP projects in Unakoti
- Micro water shed programs BDO
- During the dry spell the District Administration and DWS Department has been deployed water tanker in the various location of Unakoti District to avoid water crisis.
- Identification of vulnerable pockets and areas in Unakoti
- TSAC mapping with GIS data

CONVERGENCE WITH MGNREGA

- Under MGNREGA, 5000 Pukurs (ponds) approximately 1 Kani of each have been created in last year for ensuing sustainable water.
- IWMP and MGNREGA
- Under the convergence of MGNREGA, Drinking Water sources and Sanitation has been provided in some Schools and AWCs under Unakoti District.

MOVIE

[Click here to view the movie](#)

OBJECTIVE FOR CREATION OF PONDS

The objective of creation of ponds are

- To provide drinking water
- To protect and enhance the pond's water quality
- To protect natural biodiversity
- To enhance the sustainable livelihood through Fishery and Horticulture
- To create of income generation on a large scale.

INTRODUCTION 17 MIAR HAWAR

- 17 Miar Hawar is located in the western side and 9 km away from District Headquarter, Kailashahar under Chandipur R.D. Block.
- 180 acres of compact marshy area is fed by two streams Jarailcherra & Baguacherra
- Project to be implemented in 150 acres water body
- Earlier it was full of aquatic plants. In winter swarms of migratory birds from Siberia used to visit this place.

INTRODUCTION 17 MIAR HAWAR

- The farmers are growing one time production of corps due to lack of proper drainage and irrigation facility.
- This site currently has no proper access road and is neglected.
- The water body will act as a magnet to attract tourist in convergence with line Dept. like Forest, Horticulture, Fishery etc.



Satellite view from Google
(Co-ordinate of approximated central point $24^{\circ}15'52.2''\text{N}$ $92^{\circ}00'20.5''\text{E}$)

INITIATIVE SO FAR

- The DPC Unakoti District planned to execute a vast water body through manual excavation using MGNREGA mandays to facilitate sufficient water to the paddy farmers.
- Fund for construction of approach road and excavation of earth (phase-1) has already been placed to IO.
- Excavation of earth amounting approx Rs.1.5 crore is taken up as the initial stage for development the water body



Present condition











Approach Road from NEC Road



Present status of connectivity for the paddy growers

Prospective Future View of the project



LINE OF ACTION

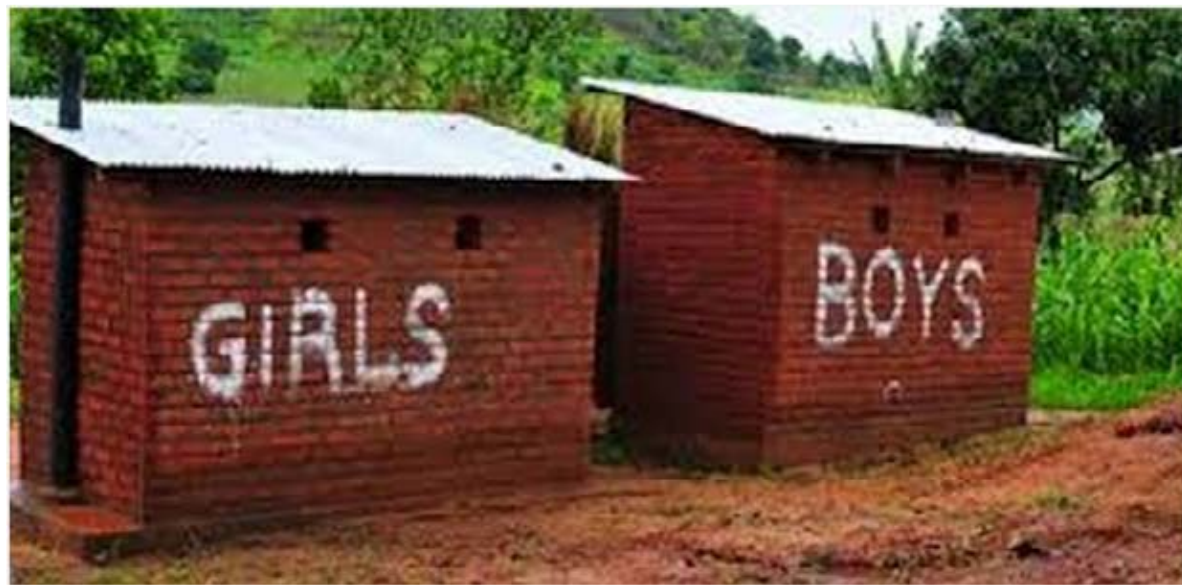
- Approx.500 families will be covered.
- Protecting fertile top soil and vegetative cover throughout the year.
- Minimizing silting up of tanks, reservoirs and lower fertile lands.
- In situ conservation of rain water.
- Safe diversion of gullies and construction of check dams increasing ground water recharge.
- Increasing cropping intensity through inter cropping.
- Alternative land use systems for efficient use of marginal lands.

OBJECTIVE OF SATERO MIAR HAWAR

- Development of a special tourism zone at Satero Miar Hawar through a multiple stakeholder mechanism.
- Identifying community level stakeholder at each site and develop managerial capabilities of such stakeholders so that mechanisms of decentralized community level.
- Promoting indigenous culture including traditional handicrafts within the tourism.
- Starting various tourism activities at the site and designing such activities in a way to attract tourists.
- Setting up of various tourist facilities.
- Ensuing sustainable water and sustainable livelihood of the area through fishery and horticulture.
- Creation of income generation.

EXPECTED OUTCOME

- Direct benefit to 500 families of 4 GP villages
- Agriculture/Horti cropping intensity to double
- ARDD to provide 200 milch cows.
- Forest has decided to get funds through Ramsar convention.
- IWMP will dovetail funds next year through phase V
- Tourism Sector will get a boost with water sports to be introduced.
- Ancillaries in service sector will develop



WASH IN SCHOOLS



WHAT IS 'WASH IN SCHOOLS'?

- Access to sufficient quantities of **safe** water:
 - Drinking
 - Hand-washing and personal hygiene
- Sufficient water for:
 - Cleaning
 - Cooking, flushing toilets, school gardens, etc when appropriate
- Control measures to reduce transmission and morbidity of WASH-related illnesses
 - Approaches to control vector borne disease
 - Diarrhea prevention and management, de-worming campaigns, nutritional supplements

WASH IN SCHOOL "PROGRAM"

- **Can mean many things, including:**
 - District-level / Block level saving water promotion campaign
 - Providing 300 schools with rainwater systems
 - Developing a funding mechanism for creation of water sources
 - National-level policy initiative
 - Instituting a school health curriculum
 - Institutionalizing a mass handwashing programme
 - Provision of WASH facilities
 - Capacity building of SMC members on WinS

BACKGROUND - WHY SCHOOLS?

- Access to drinking facility at schools is poor
- Schools are nodes of disease transmission
 - Understand routes of public transmission
- Free primary education has led to rise in enrollment
- Present an opportunity to reach marginalized populations
- Opportunity to understand what works and where
 - Better project targeting
 - Sustainable solutions

ALSO, CHILD-TO-PARENT MESSAGES

IF..

Schools are a natural learning environment

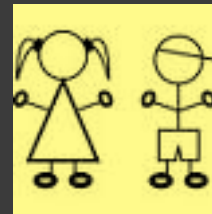


=



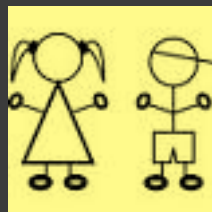
AND...

Schoolchildren only spend part of their day at school



THEN...

Children can bring WASH messages from school to their communities



+

WASH



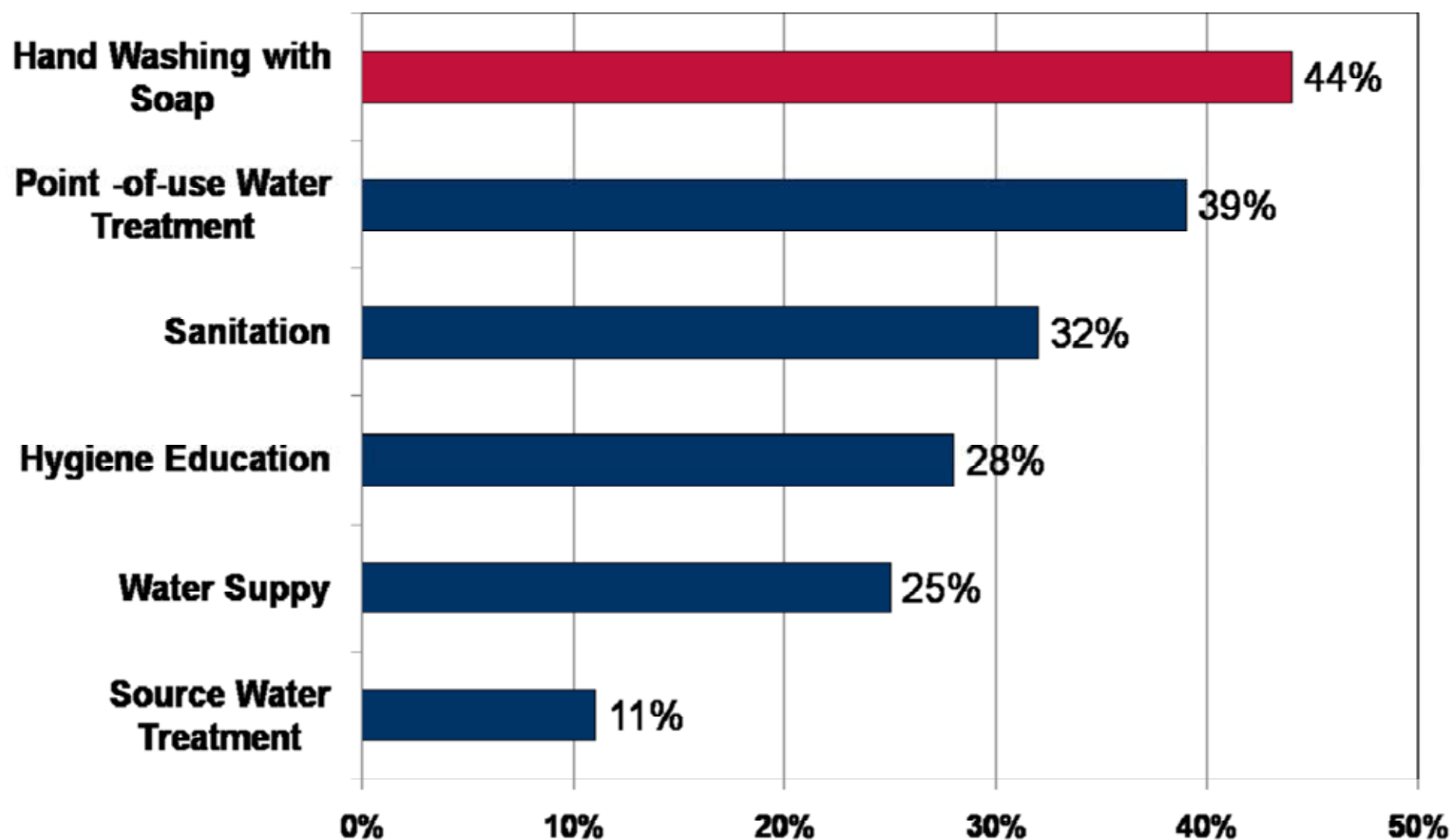
NATIONAL POLICY

- **The Approach Paper for the 11th Five Year Plan (2007-2012)** commits full coverage of schools with drinking water and sanitation facilities by the end of 2012, and coverage of 133,114 anganwadi centers with sanitation facilities in the same period
- **SACOSAN Ministerial Declaration, 2011** – commits to universal coverage of schools with child freindly WASH facilities

KEY BOTTLENECKS IN IMPLEMENTING WASH AT SCALE

- Adequacy of infrastructure
- Functionality of facilities
- Equity – boys and girls, CWSN
- Water availability, Water quality issues
- Technical skills – construction, child friendly designs
- Lack of Awareness - behaviour related concerns
- Lack of handwashing facilities with soap
- Budget – low unit cost
- O & M related issues
- Monitoring

Reduction in diarrheal morbidity [%] per invention type



Source: Fewtrell et al., 2005



PILOT STUDY UNAKOTI DISTRICT, TRIPURA

October 2013

UNAKOTI DISTRICT – AT A GLANCE



Area : 687.9 sq km

Population: 2,98,574

Literacy: 88.3%

Blocks:

- Pecharthal
- Gournagar
- Kumarghat

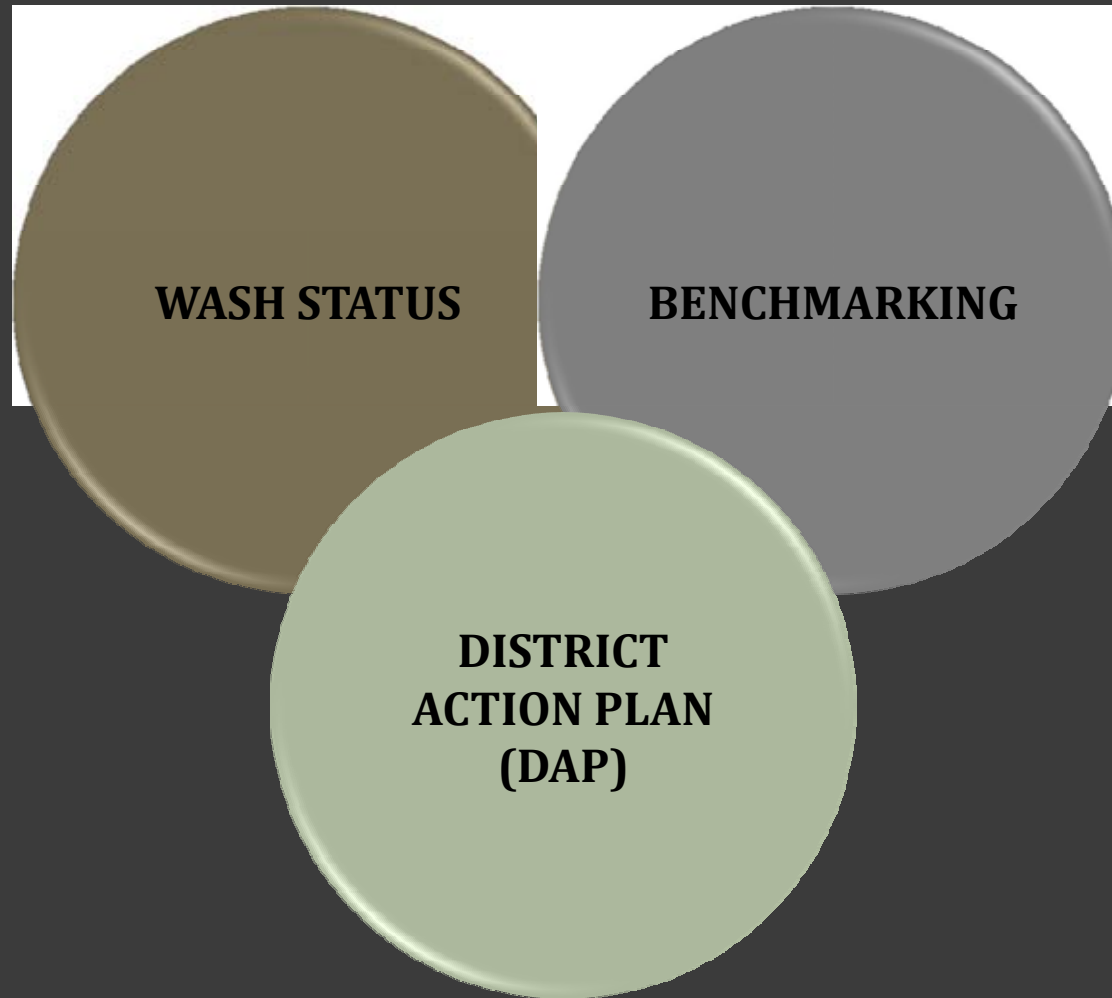
❖ Total Schools

Govt. & Govt. aided: **305**

❖ Total no. of students:

58,752

KEY INTERVENTIONS IN THE DISTRICT



SIMPLE DESIGNS AND SCALABLE APPROACH



WASH STATUS

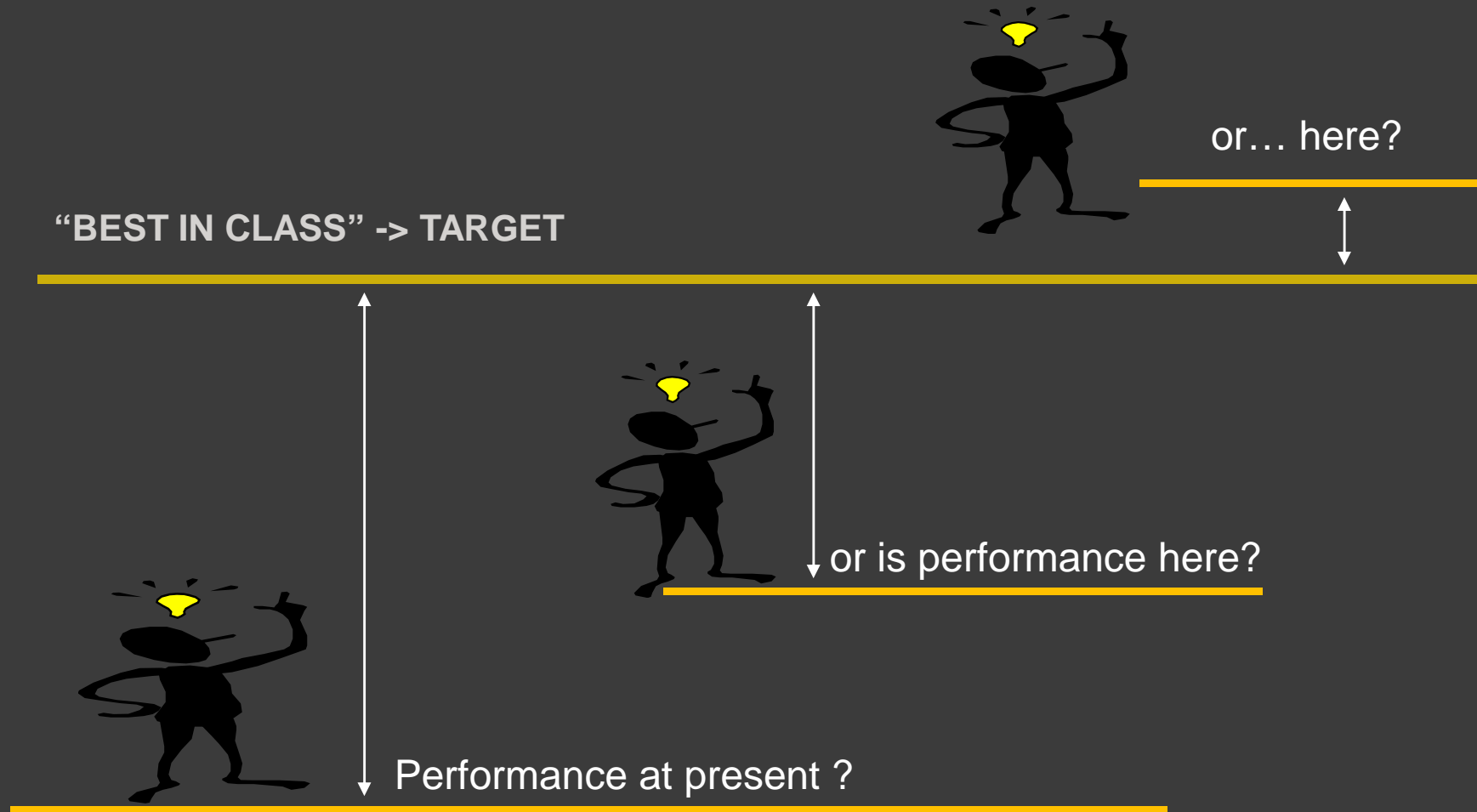


Drinking water facilities

BENCHMARKING

- Benchmarking is a process of
 - Measuring performance and practices in key areas
 - Comparing them with **best practice**
 - Subsequent translation of this best practice into use
(by introducing infra, capacities, process)
 - Leading to superior performance – *Performance improvement*

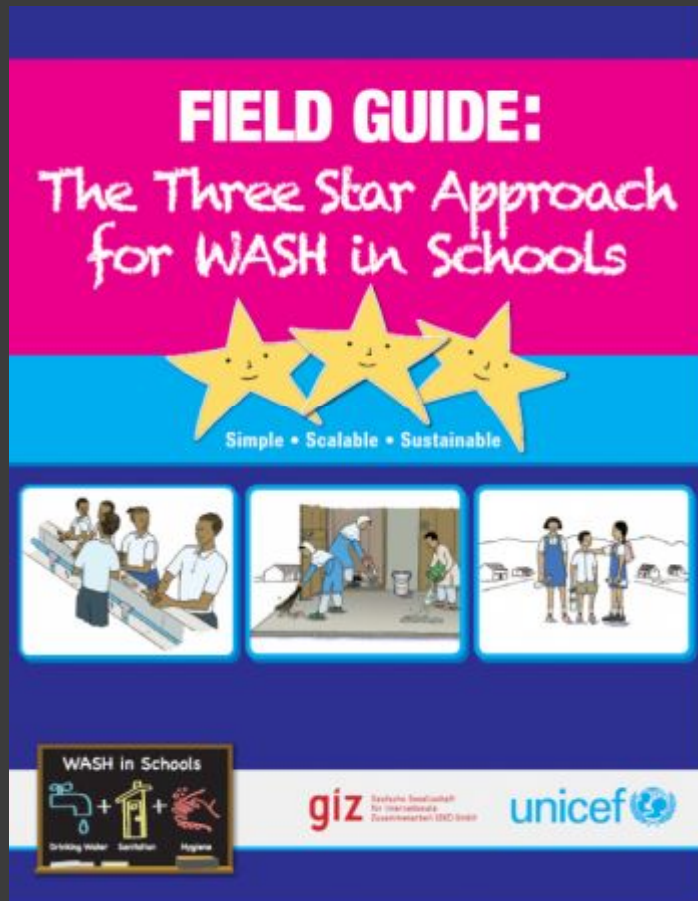
BENCHMARKING – IMPROVING BY COMPARING



BENCHMARKING METHODOLOGY - THREE STAR APPROACH

- Three star approach developed by UNICEF-ASCI
- 17 indicators focusing on the following areas:
 - Water
 - Sanitation
 - Hygiene
 - Maintenance
 - Food Safety

BENCHMARKING METHODOLOGY - THREE STAR APPROACH



With three stars as the highest achievable rating, each star category would cover all the five parameters with varying levels of achievement.

Schools aspiring for :

- **One Star** would need to cover minimum WASH requirements
- Reasonable infrastructure upgrades for **Two Star** and
- Meet national standards for **Three Star** rating

KEY CHARACTERISTICS OF THE THREE STAR APPROACH



- Daily routines to promote healthy habits



- Incremental improvements



- Meeting national standards

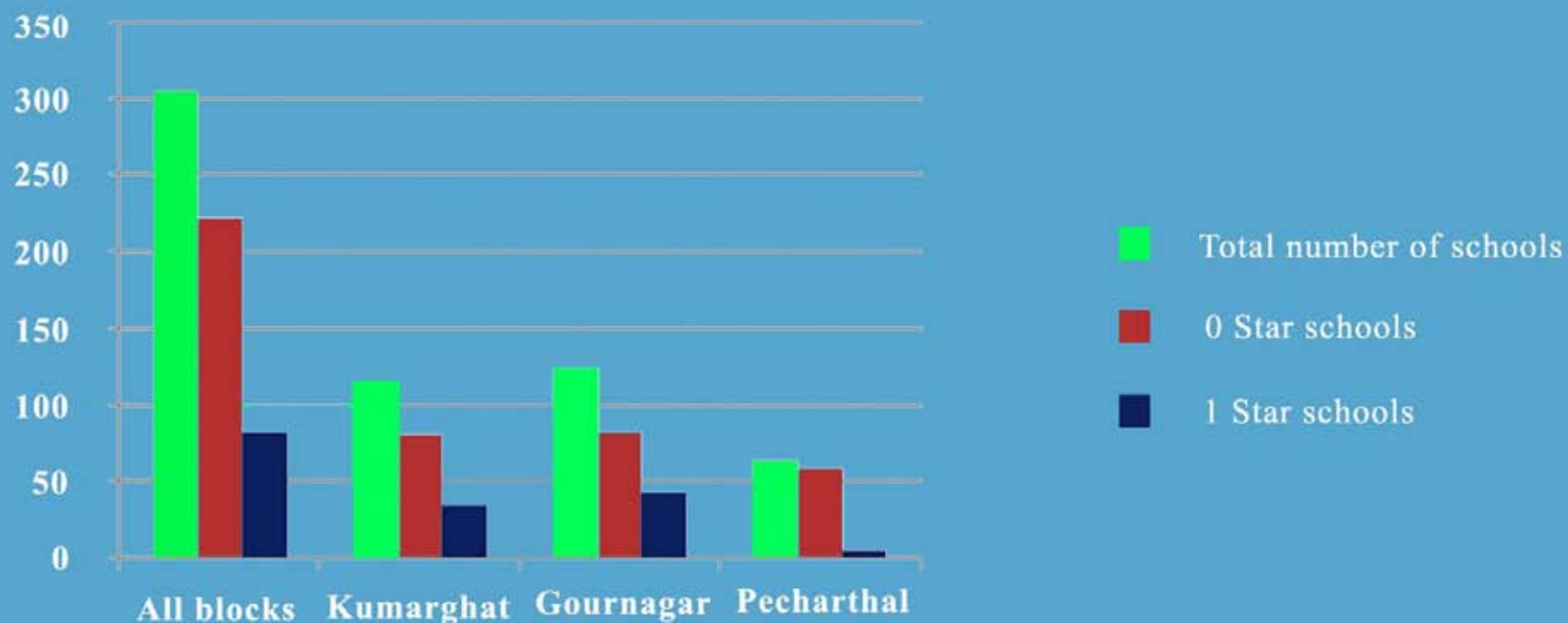
BENCHMARKING EXERCISE IN UNAKOTI



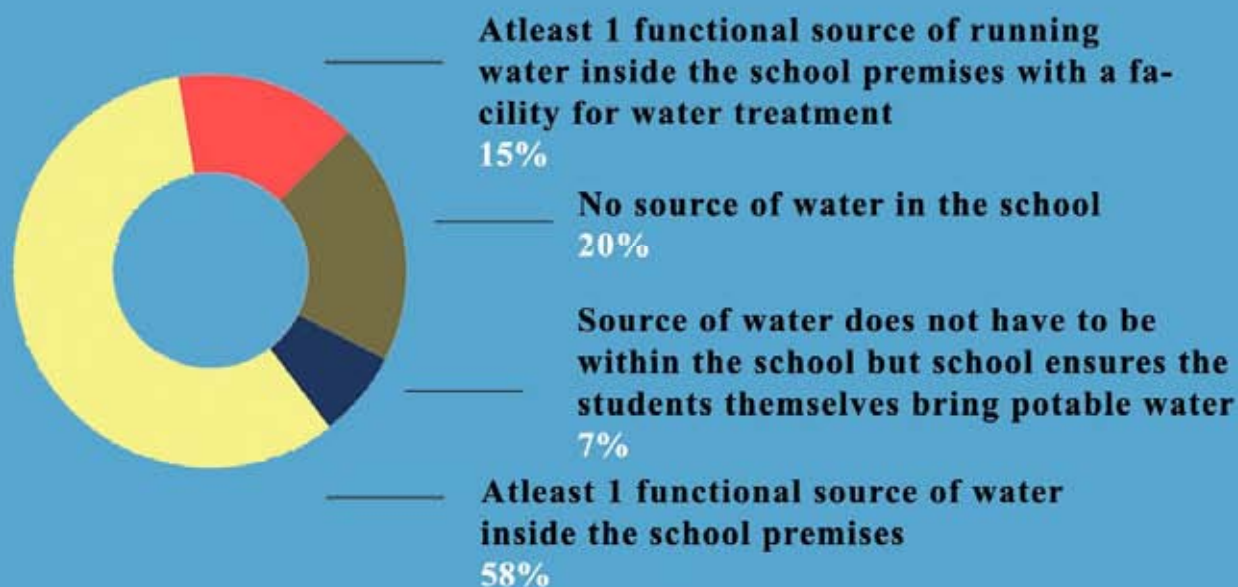
BENCHMARKING RESULTS IN UNAKOTI

| District | Total Schools | 0 Star Schools | % (0 Star) | 1 star Schools | % (1 star) |
|----------|---------------|----------------|------------|----------------|------------|
| Unakoti | 305 | 222 | 72.8 | 83 | 27.2 |

Status of Schools against Benchmarks Unakoti, Tripura

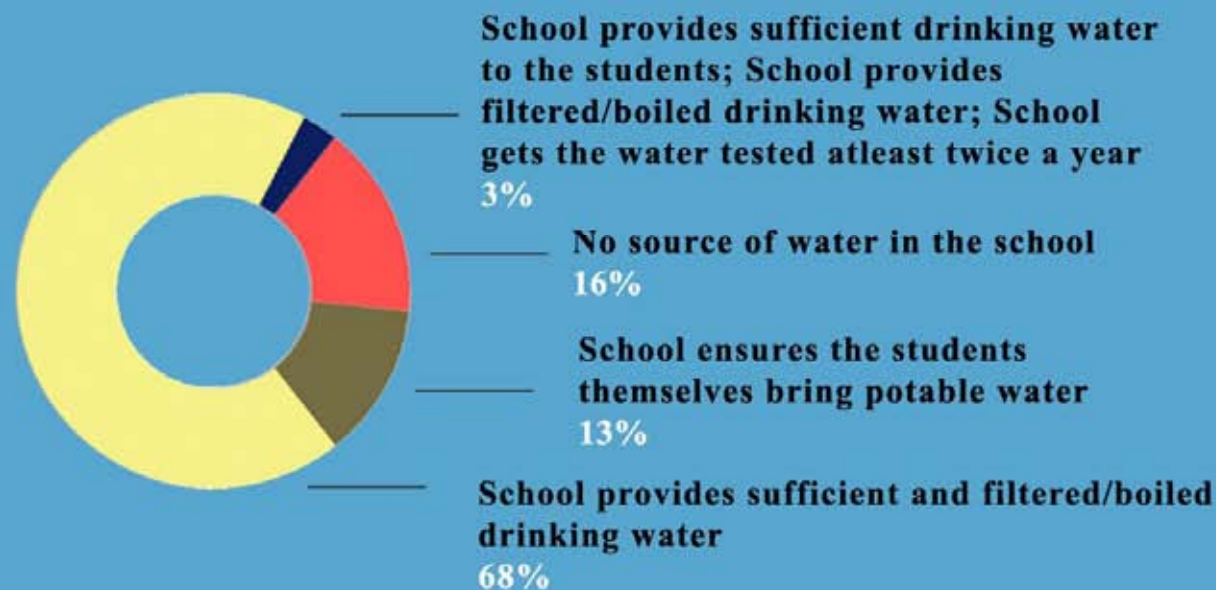


1 Source of safe and reliable drinking water



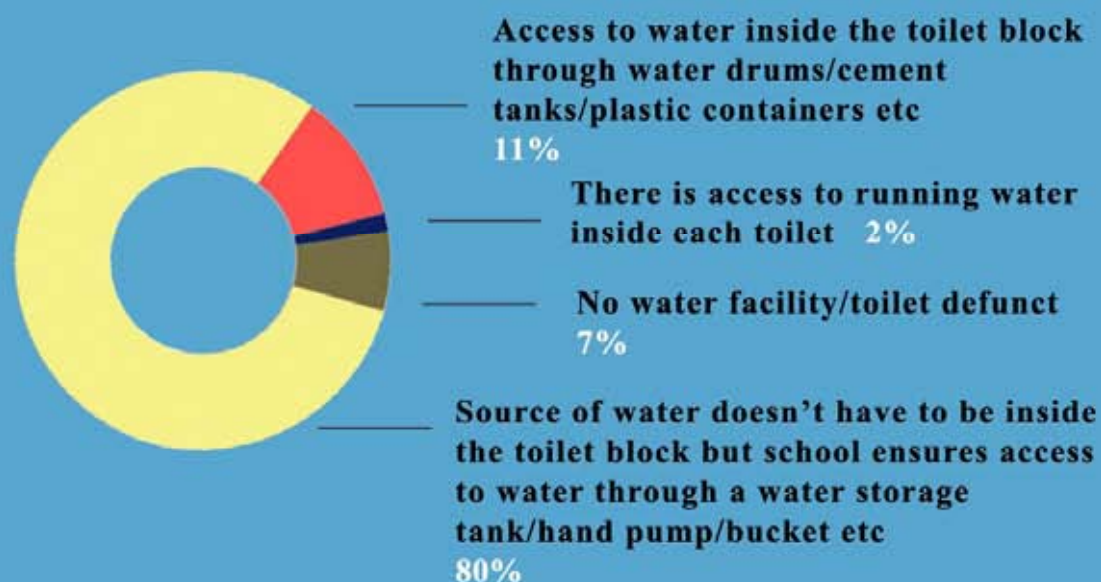
Around 6,000 students do not have a protected source of drinking water in schools and are dependent on streams, mark II wells, and kutchha wells.

2 Availability of potable drinking water per day in day schools



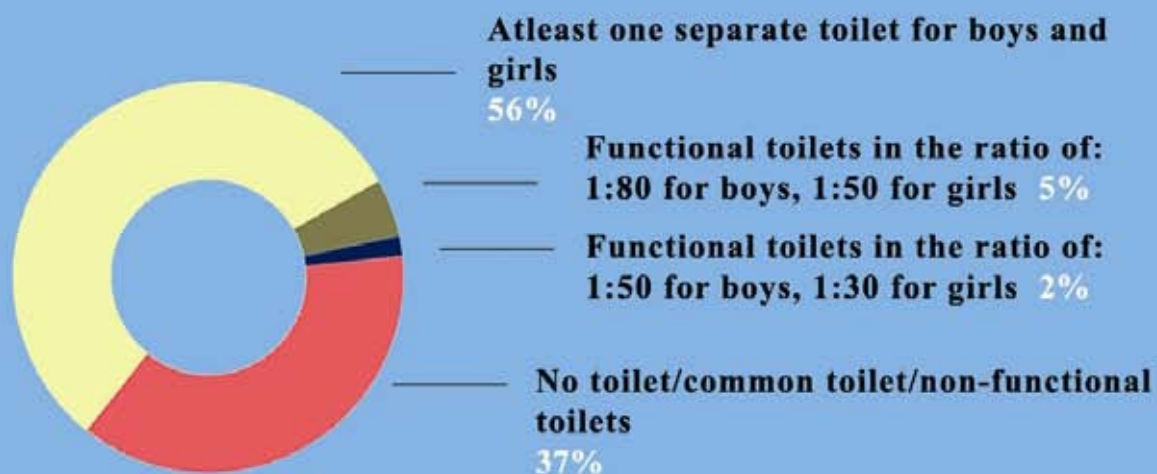
About 6000 students have access to less than the basic requirement of 1.5 liters of drinking water at schools.

3 Availability of water per day for toilet in day schools



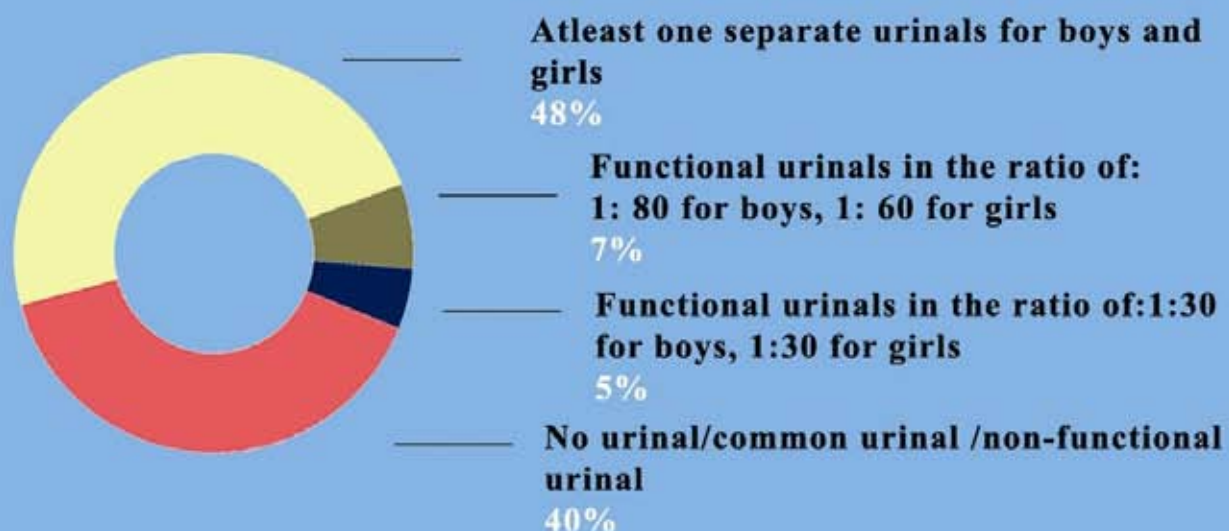
3225 students in 21 schools do not have access to sanitation facilities due to lack of access to water or defunct toilets. 1577 among this are girls.

4 Availability of separate functional toilets



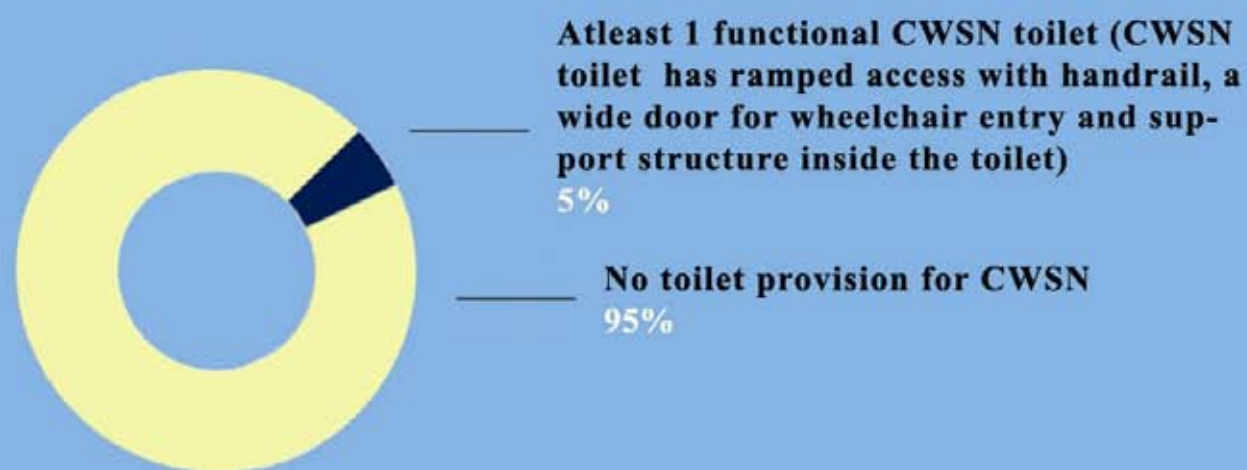
Functional toilet components: Access to water, ceramic rural squatting pan, door with latch for each toilet, ventilator in each toilet or an opening for sunlight exposure, roof, bucket and mug in each toilet. 6500 students across 35 schools do not have toilet access - 3200 among them are girls. 36 schools have 2952 girls sharing common toilets with 1971 boys.

5 Availability of separate functional urinals



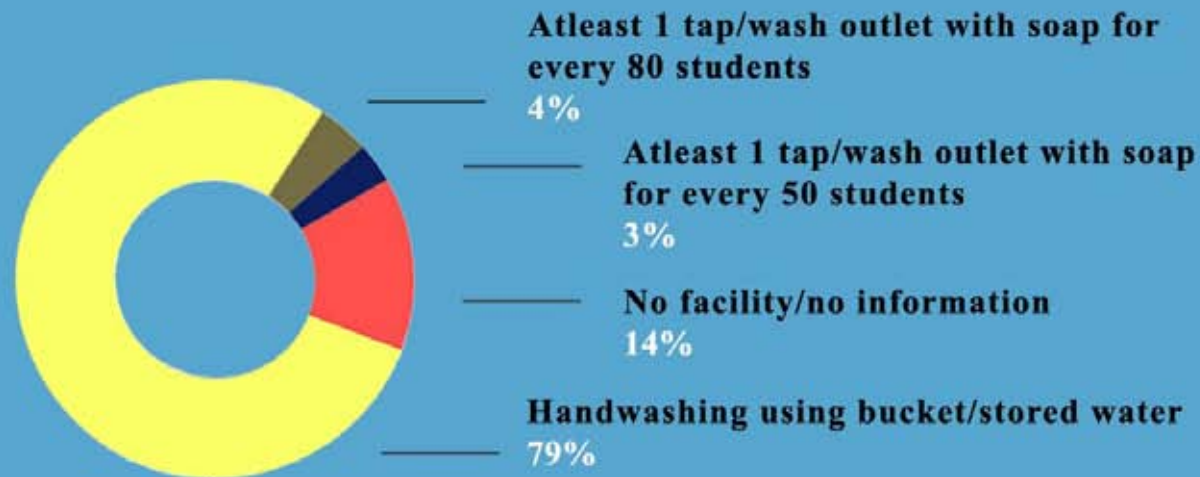
Out of 142 schools that fall under No urinal/Common urinal/Non-functional urinals category, 85 are primary schools. 37 schools have common urinals, 34 schools have non- functional urinals, 16 schools do not have urinals. 24 schools have toilets either for only boys or girls.

6 Availability of functional toilet facilities for children and teachers with special needs



A household survey in 2012 identified 425 CWSN out of which 391 children are studying in 117 schools. Only 16 schools have provision for CWSN friendly toilets.

7 Functional hand wash facilities for use after toilet



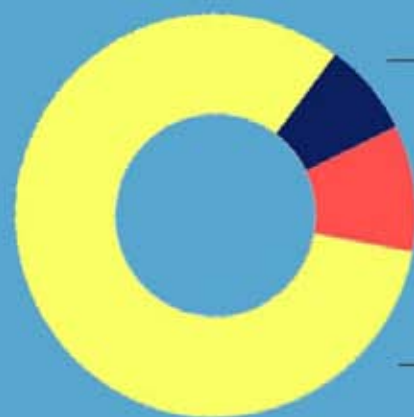
Wash outlet could be a bucket of water, hand pump, wash basin or a tap. Consistent availability of soap seems a major challenge.

8 Functional hand wash facilities for use before meals



Majority of the schools have at least one wash outlet to wash hands but not necessarily designated for use after meals. Most common source of handwashing is handpump.

9 Hygiene education in school



Part of schools routine; atleast 10 hours of hygiene education during an academic year

7%

Hygiene education not institutionalised

10%

Hygiene education is part of schools routine - morning prayer/informal education

82%



While basic hygiene awareness such as brushing teeth, cutting nails, combing hair etc is covered during morning assembly, focused education on handwashing habits, hygiene during menstruation are not institutionalised.

12 Cleaning and maintenance of school environment



Cleaning of classrooms and school environment -daily; Cleaning of toilets atleast once a week; Cleaning of water storage tanks atleast once in three months

55%

No maintenance plan

26%

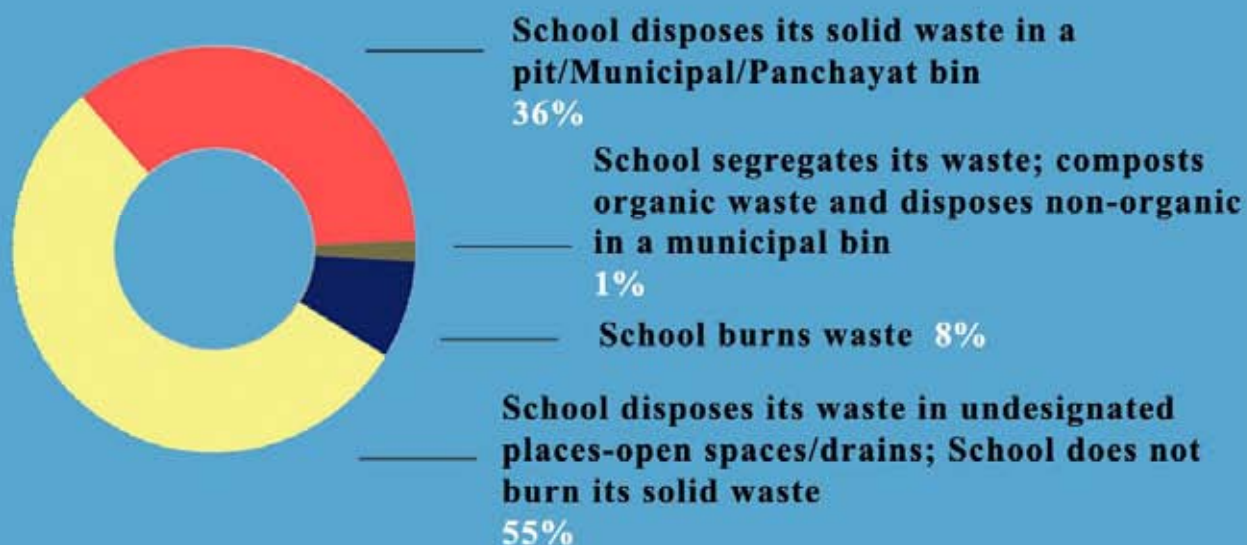
Cleaning of classrooms and school environment -daily ; Cleaning of toilets daily; Cleaning of water storage tanks atleast once in three months

19%



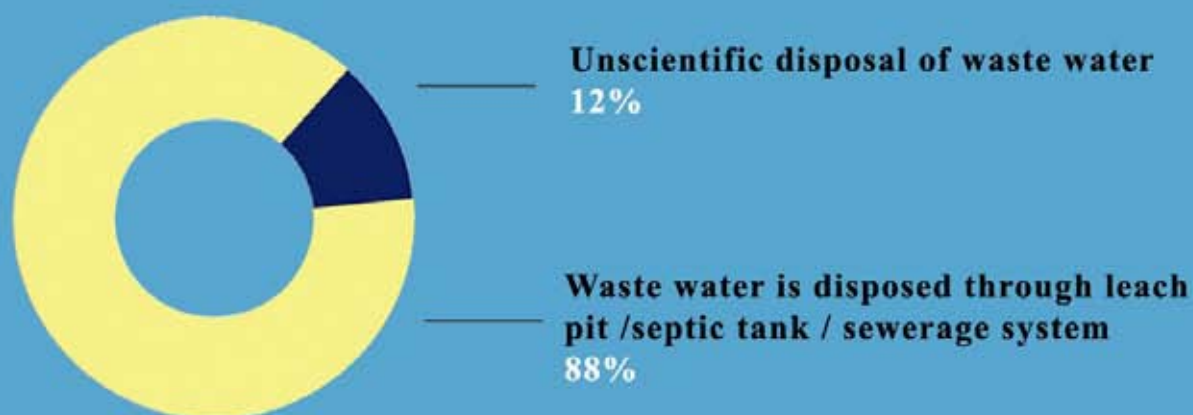
While classrooms are cleaned everyday, regular cleaning of toilets seems a challenge.

10 Safe disposal of solid waste



Most schools do not have access to municipal bins for waste disposal and dispose in pits dug within the school premises or in the open.

11 Safe disposal of wastewater from toilets

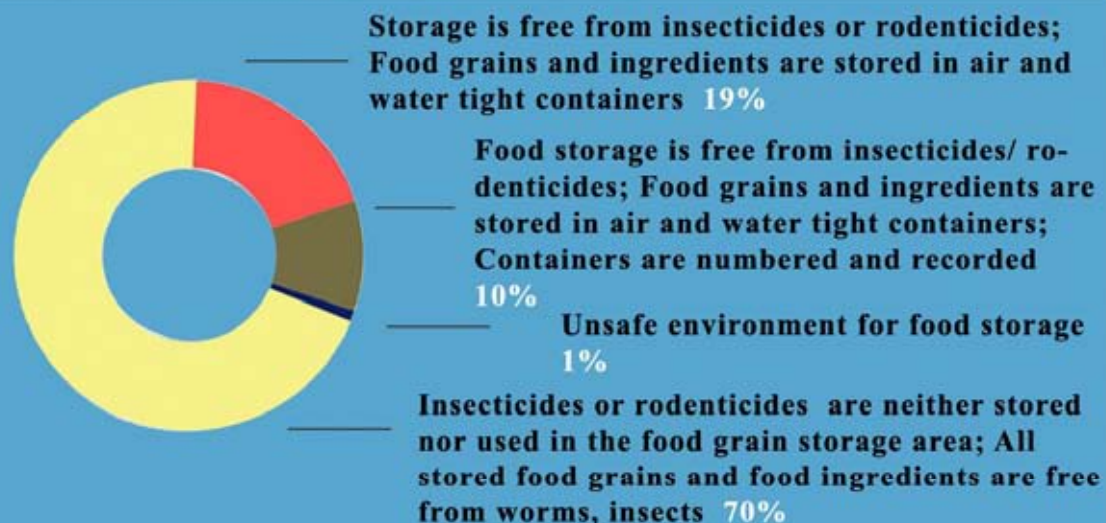


Most toilets that are not connected to sewage systems are usually situated in hilly areas and dispose waste water down the slope or in kutchra drains.

BENCHMARKING INDICATORS

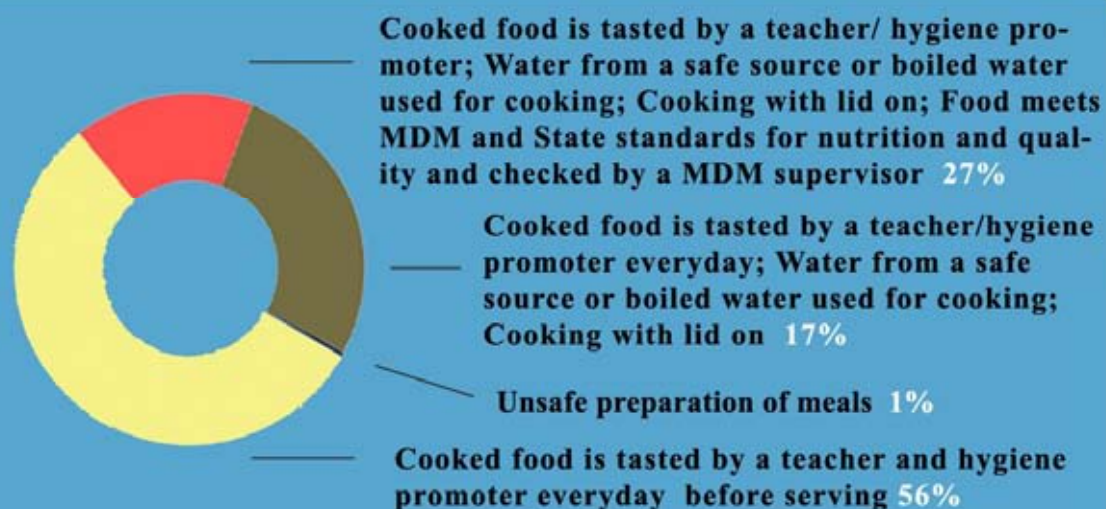
DISTRICT UNAKOTI, TRIPURA WASH status in Schools

13 Safe storage of raw food grains



Where schools do not have kitchen sheds or designated storage, food is often stored in staff rooms.

14 Preparation and cooking of meals



Field observations suggest that in absence of reliable water source, maintaining hygienic practices during food preparation becomes a challenge.

15 Hygiene Practices



All children hand wash with soap before eating mid day meals, supervised by a teacher
There's a designated time and place for children for hand washing with soap, before the meals are served.

Cooks and serving staff aren't suffering from any infection and is checked by staff.

Hand washing with soap by all cooks and helpers before cooking and serving food and is supervised by a teacher 31%

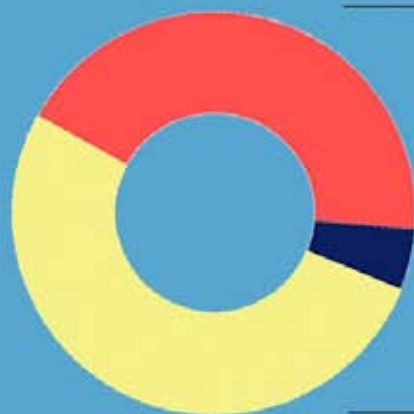
Not institutionalised/no routine 5%

All children hand wash with soap before eating mid day meals, supervised by a teacher 64%



Challenges in adopting hygiene practices include non-availability of water and soap.

16 Safety Precautions



Cooking area reasonably far from eating area; Food served away from inflammables; Doors and windows of cooking area are functional and have latches **43%**

Cooking area reasonably far from eating area; Food served away from inflammables; Doors and windows of cooking area are functional with latches; Fire extinguisher/ Water/Sand for dousing fire close to kitchen; Improved/smokeless chullahs **5%**

Cooking area is reasonably far from where children eat; Food is served away from highly inflammable cooking fuel **52%**



Field observations suggested that fire extinguishers are not placed close to kitchens.

Many kitchens do not have dry storage areas for storing food grains and other perishables.

17 Emergency Preparedness



At least one emergency drill is undertaken in a year **65%**

Emergency drills undertaken as directed by Dir.of school Edu.; Protocol for fire alarm and other emergencies is developed **7%**

No emergency plan **28%**



Tripura Disaster Management Authority stipulates that schools have emergency plans that include fire drills, exit routes, staff training in fire safety, and evacuation plans.

DISTRICT ACTION PLAN FOR SCHOOL SANITATION

- A District Action Plan (DAP) for school sanitation & drinking water facilities are the comprehensive medium term plan prepared in a consultative framework and is aimed at achieving WinS vision and goals
- Includes 3-star rating system
- Fills gaps such as infrastructure, capacity building, staffing and gaps, convergence, funding transfers, financial models with an emphasis on low cost or no cost interventions
- Funds sanctioned the works will be taken up in phase one.

THANK YOU

*Shri Abhishek Chandra, IAS
District Magistrate & Collector
Unakoti District : Kailashahar
Phone No.03824-222277 (O)
Fax No.03824-233026
Mobile No.9436132826
Email ID:-dmunakoti-tr@nic.in*