

People's school for water literacy

A private high school in Sirsi, in northern Karnataka, India, is not stopping at imparting academic education. It has also started teaching practical water literacy to the people of five Malnad districts. The rain centre at the school, with 28 examples of rain water harvesting, opened in early June. Shree Padre reports.

This private high school, Neernalli Madhyamika Shikshanalaya at Neernalli, seven kilometres from Sirsi, district headquarters of Uttara Kannada in Karnataka, will play a double role henceforth. Apart from imparting academic high school education, it will teach water conservation to the people of the adjoining five Malnad districts. From early June, the school started hosting the Malenadu Male Kendra - Kengre (MMKK), first of its kind and a one-stop information clearinghouse for rural rainwater harvesting (RWH) in the country.

In and around the school there are 28 examples or models for water conservation and RWH - including an infiltration pit, a contour trench, a

staggered trench, an open well recharge, a bore well recharge, a gully plug, a recharge through termite hills, roof water usage and educative demonstrations like measuring rain, leaky taps, tippy tap (five litre recycled jerry can that provides metered doses of water), etc. Adjoining the playground, there is a percolation tank which takes all its run-off. The noticeboard says that it's the 'water vessel' of the hamlet. Shivanand Kalave, a development journalist and RWH activist is the brain behind this project.

Apart from the models, MMKK includes a few real and working RWH structures that are not used for teaching. Not far from Neernalli are many interesting structures that have been built to conserve water. These include perco-

lation tanks, known locally as johads, that were constructed seven centuries ago in Sonda, and a unique traditional check-dam constructed by the Sheeliga community that allows debris from the forests to flow over the dam without blocking it and causing flooding during the rainy season.

There are many 'tell-tale' spots that convey the lessons of afforestation, the problems of monoculture, natural regeneration, and how soil erosion can be checked by growing grass. An experienced guide is present to explain everything to visitors, and if Kalave is present, visitors have the benefit of his experience and thoughts about biodiversity, forest development, ill-effects of deforestation etc.

Kalave is an impressive communicator. He has been talking about RWH in the state for the last five to six years. His studies of the relationship between forest and water and the need for biodiversity are impressive and he is often asked by forest officials to have slide-shows for their own staff.



Simple groundwater recharge to augment open wells.

Awareness for self-help

The rain centre received a boost four years ago after the municipal authorities in Sirsi decided to build a dam across the Kengre river to supply water to the town. This would have adversely affected the local farming community as the dam would have cut off the flow downstream. After angry meetings it was suggested that a better plan would be to start RWH and the dam proposal was withdrawn.

After the controversy Kalave felt that the citizens of Sirsi should be more self-reliant regarding water. Consistent efforts motivated 300 families to take up open well recharging on their own. Most of the homes in the town are now harvesting water in a big way thanks to Kalave's painstaking campaign.

"We dreamt of a rain centre without a penny in our pocket," recalls Kalave. In 2004 Kalave explained his dream to local MP, Ananthkumar Hegde. Convinced about the concept, Hegde gave Rs.2 lakhs (\$3000) from his fund. Subsequently, Madyamika Shikshana Samithi, the trust that runs the school, patted his back with Rs.50,000 (\$1500) and offered the five acre location to develop the rain centre. The display board and information posters were sponsored by the Forest Department and the local Kanara District Co-operative Credit Society bank. It is refreshing to note as well as the beneficiaries of Shivanand Kalave's RWH campaign, government departments and organisations have joined hands in making this dream a reality.

Students and teachers in the high school are now being taught to discuss water matters with visitors. The methods shown are relevant to the whole heavy rainfall area of Malnad comprising Uttara Kannada, Dakshina Kannada, Udupi, Chikmaglore, Kodagu and Shimoga. Kalave emphasises the importance of water harvesting in this forested part of Karnataka. "In Malnad, there should be a tank above the arecanut gardens. A devara kadu (sacred forest) in its catchment has to support this tank by percolating the rainwater into it and



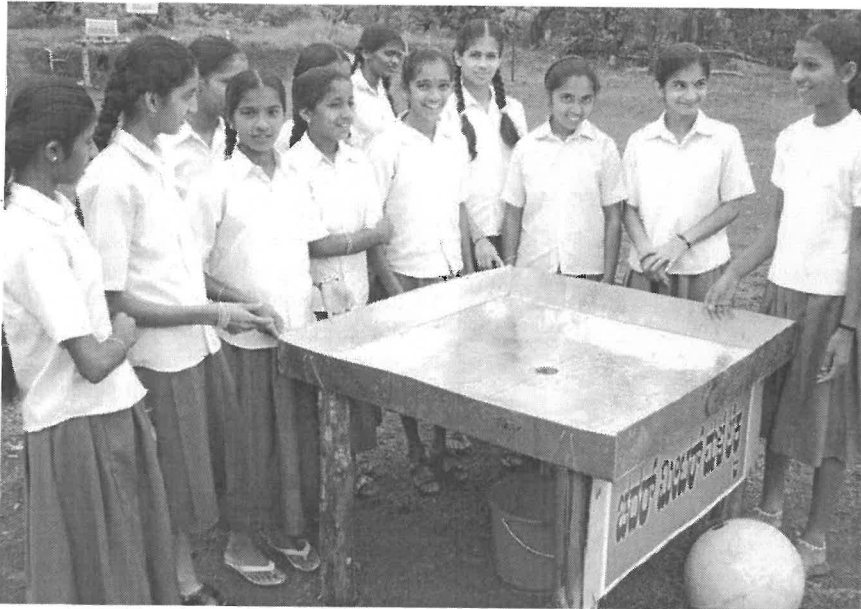
Groundwater recharge is possible through abandoned termite mounds - this is a successful farmers' method.

protecting it from silt. Unfortunately, our betta lands (upper hillocks adjoining the gardens) have turned barren. Unless and until they develop canopy cover, our life won't be sustainable."

"The urban-rural conflict of ours clearly made us realise that we need to make serious efforts to educate our people, may they be urban or rural. After all, nobody can live without water, you see," points out M S Hegde, MMKK chairman. "So, we thought

'showing by doing' is the only way that will catch public attention. Our rain centre is the result of three years preparation. In the meantime, we were successful in grooming hundreds of ambassadors of RWH, who are eager to share their success with fellowmen."

The chief executive officer of Sirsi's zilla panchayat (the elected district-level civic body for local administration & development), Shivananda Moorthy, has clear plans



How much rainwater falls on one square metre? Students in discussion in front of the demonstration.



A panoramic view of Malenadu Malekendra, Kendra at Neernalli School

to utilise the rain centre. "We will encourage all the schools and colleges to take students teams to the centre under the leadership of one or two interested teachers. Our gram panchayat members and officials would have a clear cut idea of what RWH is by seeing all the models and taking a round in the nearby forests. Such lessons are very difficult to understand without seeing a live model. We're bringing out a monthly newsletter by name Grameena Bharatha from the district panchayat. From henceforth, we will keep one page for soil and water conservation, success stories and lessons from Malenadu Male Kendra."

V Vijay Mohan Raj, deputy conservator of forests in Sirsi is happy. "We have 133 grama aranya samithis in about 100 villages. Our district Uttara Kannada has forests covering 40,000 hectares. But unfortunately, these are in very serious degradation. We have already initiated many soil and water conservation measures including construction of new johads inside the forest. For us, the rain centre is very handy to boost up the interest of farmers and to make them understand the relation between forest, soil and water. If more and more local people understand and start acting towards the conservation, it is good for our forests."

Kalave says that he and his water activists get many phone calls every day asking about RWH and how it can be done at their house or field. "This is really laudable because these are the persons who are ready to do it without government subsidy. At the same time, it is really ironical that just for the want of clear guidance or moral support, thousands of people have not been able to harvest rain. Our state government has to take a serious note of this and if not anything else, take immediate steps for mass education in water conservation." No doubt, initiatives like this rain centre by local communities maybe one in each district, would catalyse water literacy considerably.

H2O house for real life experience

A 'H2O House' is the second stage



Shivananda Kalave, the brain behind the project.

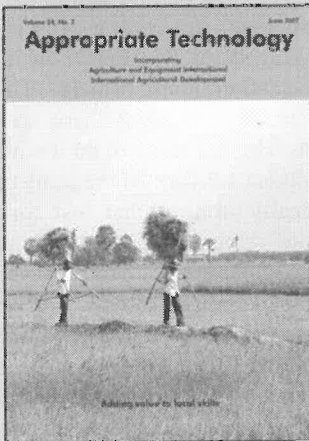
dream of MMKK. (H2O is the chemical name of water). Elaborates Kalave, "It will be a typical tiled Malnad house with roof water harvesting, solar lighting, grey water reuse, kitchen and all the hands on eco-friendly techniques incorporated. It will have an LCD projector, a library and meeting hall with staying facilities for 50 people. Visitors will have a real life experience in drinking rainwater and using and forming an opinion about all these simple, but sustainable systems." The estimated cost of the 'H2O House' is Rs.40 lakhs. MMKK is seeking voluntary contributions from the public and organisations.

Shree Padre is a journalist and author of several books, including rainwater harvesting, published by Altermedia.

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