waterlines

APPROPRIATE TECHNOLOGIES FOR WATER SUPPLY AND SANITATION
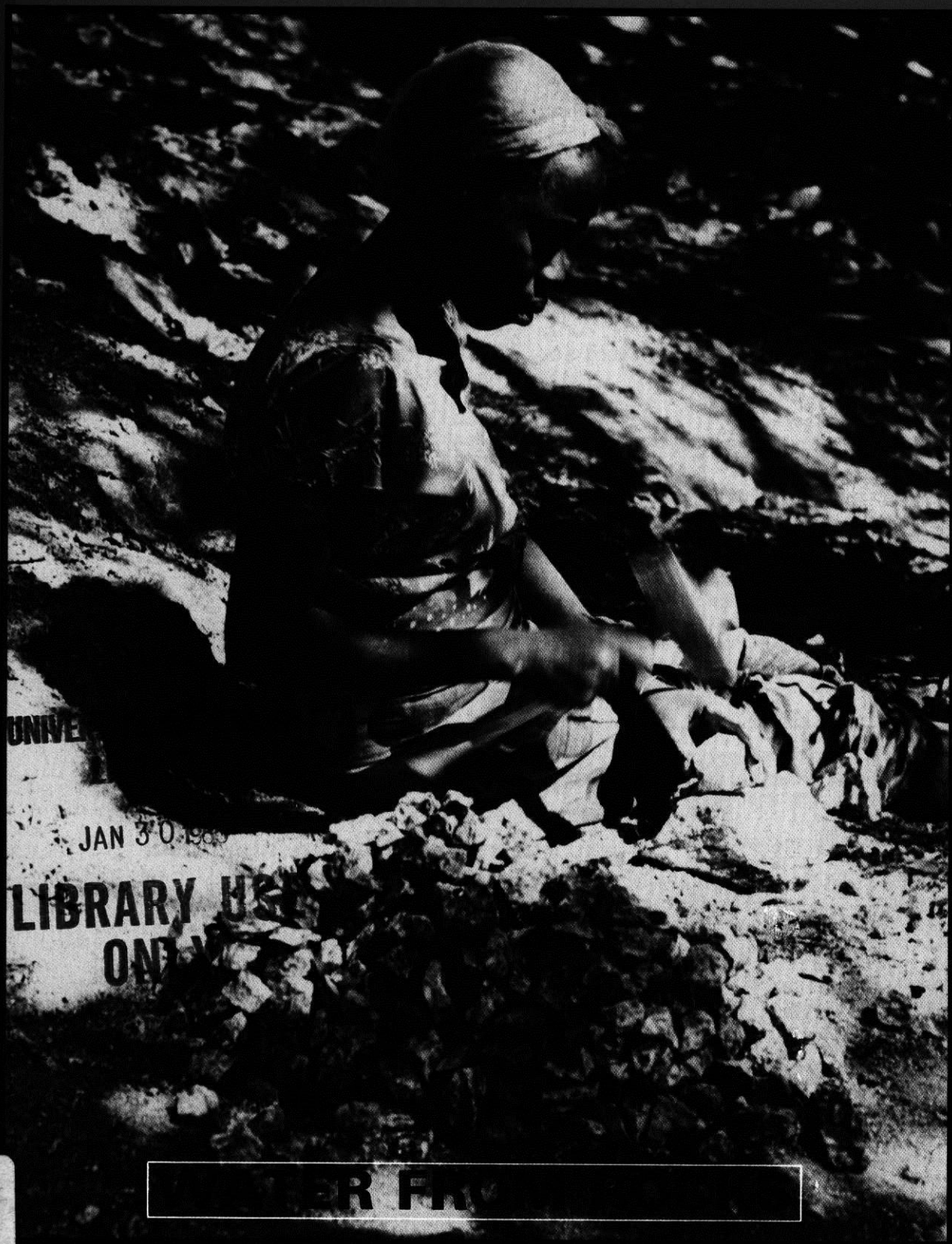
Facing the people: the demystification of planning water supplies

by David Drucker*

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THE 'people' side of development is still, in most cases, only an icon to which planners bow. But their real attitude to community participation can be illustrated by a review I recently made of 80 countries where water projects are managed by an international agency which is a leader in its strong commitment to the social elements of development. Its Board of Directors has made it mandatory that community participation must be an integral part of any project.

Yet, of the 80 countries, 45 provide no information on such matters at all. Twelve give a cryptic phrase or two, and together with 12 more (of the remaining 23), indicate that free labour is the role ascribed to the community. If interpreted generously (if the community contributes some suggestions regarding the site selection of distribution points, for instance) only 11 of the 80 indicate that the community plays some part in planning. Of these, only three expect the community to provide some information, and in just one country of the 80 the community is expected to be involved in evaluation.

Necessity

But the community's involvement in water supply projects is not just a matter of cheerful philosophy but a crucial technical necessity, if development objectives are to be realized.

Community participation cannot be planned merely as an added component to what we already have and the way we already do things. What is required is that a new approach, from the community's perspective, must permeate the planning, programming and implementation of projects.

Furthermore, community participation is not a manipulative and automatically induced means to *our* ends, but becomes a development objective in its own right, meeting the com-

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munity's ends – and these must be intimately related to all the community's technological objectives.

'Participation' is fundamentally an act of mutually respecting *partnership*. Partnerships take time and effort to establish and can only flourish where there is mutual *trust*. Trust is not too easy to come by: it has to be solicited, worked for, have exaggerated demands made upon it at first, to test its reality and solidarity; and then it must be gradually earned and given life.

Predators

Ever since nomadic people discovered the connection between sowing and reaping and the advantages of fixed settlements, they have had to defend themselves from predators. There is little experience among agricultural people of anyone coming from outside for reasons other than to further *their own* interests, to exploit and often to plunder. Rural people *know* this in their very bones, and the assurances of those of us who speak the words of development, and control or represent the organizations of modern nation-states, have rarely been followed by sustained action to convince rural communities that anything will ever change in this respect.

Suspicion, caution, apathy, obsequious acquiescence, are very common responses, and are often the defence mechanisms which meet officials and status-bearing visitors to the villages. Curiosity naturally sometimes overtakes anxiety, especially among the children, and hospitality is often used to contain, disarm and control real penetration from outside.

Disarm

This is often, of course, experienced pleasurably by short-stay visitors, but as the saying goes: 'The back of the head of the departing guest is beautiful'! So we are not aiming only for

water supply, primary health care or another such objective, but are to include in planning and operation the enhancement of each community's capacity to organize itself successfully for future development efforts.

Open surgery

One example of an attempt to encourage self-organization grew from the experiences of a medical team which unrolled a mat on the steps of a temple in Karnataka, India in view of the whole community; the doctors and health workers were encouraged to turn around from facing a patient to facing the community. Such an unusual event brought about a swift assemblage of village people.

Usually the doctor addressed the patient (or a specific organ or part of a patient) on a one-to-one basis. The doctor's behaviour was mysterious to the patient being questioned, examined, treated and directed. Often such a procedure ended with a symbolic piece of paper which might produce (at a price) an unknown substance endowed with potent properties.

Now, instead of the doctor being hidden from the crowd, the doctor gave a public performance; the crowd became the prime target for the health team. The doctor acted as a group leader, encouraging the 'audience' to participate.

In this approach, patients (especially those suffering from common ailments such as scabies, wounds or diarrhoea, were drawn from the audience and the professional examined the patient in full view, explaining to the audience as he did so, in very simple and appropriate language, what was being done and what the signs and symptoms were. The questions to the patient and his replies, along with the whole procedure, were conducted as a public case discussion, in terminology that the villagers were helped to understand. A simple explanation of the problem was given, followed by appropriate information regarding how such conditions come about and what action can be taken to prevent or minimize them. The treatment and management of the condition was carefully explained. The *preventive* aspects were emphasized.

The audience was asked if there

were others among them who had similar complaints, and the professional briefly examined them and where there was some doubt, separated them for more extensive examination. He put in a group all the patients who, he confirmed, had correctly identified themselves as having problems similar to those of the demonstrated case. Of course, not all patients need to be dealt with in this way, although this should be the major 'visible' style of practice.

Even so, in accordance with village values, one is careful to avoid public display of matters which may damage people in the eyes of their fellow villagers, for instance, affecting their acceptability in marriage. A village-oriented health worker should soon become sensitive to what these special matters are.

Volunteers initially identified at group surgeries like this eventually became community health workers. They were first trained to identify the signs and symptoms of one particular disease common in the area, and shown how to treat it. They were given the necessary medicines and tools and told at what point they should seek specialist help. Their effectiveness relied on their fellow villagers knowing that they were the person to go to first if they had a specific problem.

The villagers were eventually encouraged to deal with the threats to health in their village which led to these diseases being common. This was done with help from outside but on their own responsibility.

Child's play

I found myself, after much experience of 'top-down' planning, emphatically insisting on demystification, and heard myself say that 'planning is child's play'. I remembered how often I had enthused about the expertise of children and how they constitute an untapped development resource. They are not usually recognized as manpower, even though a recent report states that in South Asia alone, 29 million children are gainfully employed, by ILO standards. Another fact is that children *know*. They know an enormous amount, and adults have failed to gather and put to use the very careful *research* undertaken, quite voluntarily and without guidance, by children, using their inherent sense of curiosity.

When I was working in Burma it occurred to me that it was possible to involve children in this preliminary inspection work. I thought that this could be managed in the form of 'I spy' games.

The original game goes like this. Someone says 'I spy with my little eye something beginning with . . .' A letter is shouted, and the other players have to guess what object in sight beginning with that letter, has been selected.

One such game could be, for example, to look for every conceivable water source in the surrounding area. The children could work in pairs or teams, leaving some kind of marker or agreed 'secret sign' at each source discovered, so that the same source is not claimed more than once by any 'player', and so that a proper claim is made of each 'find' and can be judged to belong to the first finder. Some kind of points system and reward for the most points could be devised. All the information from this 'I spy' game would then be brought together and displayed on the largest possible area on which an outline map of the village or community can be marked out – the school playground, a sports field, a market square, the side of a house. The map can be outlined with chalk, stones or bamboo, or scraped on the dry earth. The children can make models with mud, coconut shells or cardboard. Then, with sections of the map allocated to pairs of children, they would fill in the map, marking all the water sources.

A village leader, a health worker, or a youth group might organize the whole game. Better still, an enterprising school-teacher might use a water 'I spy' game to teach and link many aspects of the curriculum, preferably as a practical activity illustrating what the school is supposed to be teaching anyway – map-making, charts, graphs, handicrafts, hygiene, social studies, essay-writing – or as a valuable learning project in its own right.

From this basic game, we can move on to an 'I spy Sanitary Inspector'

The traditional face of medicine – a child receives immunization at Chicksarangi village in Karnataka, India
Photo: CWDE/World Bank/R. Witlin

Children's inherent sense of curiosity leads them to gather information from their surroundings all the time

Photo: CWDE/WHO/T. Kelly

game. Teams are again formed and rewards given, this time to the team that identifies from all the sources the situations most likely to damage the water supply. Participants have to be told all about these beforehand. They include cattle drinking, people bathing, clothes washing, open wells, and nearby defaecation. They must place a sign to mark the danger and to claim the site for their own. The signs could be semi-permanent so as to mark the site until the risk was eradicated.

Now the risks would be added as big red spots, perhaps, to the sources plotted on the huge map. These water games might be played as part of local water festivals such as Holi, Maha-thingyan and so on. When the whole layout is satisfactorily completed, the village leaders and the whole village should be invited to attend a ceremonial inspection of the map. The whole thing will be explained, preferably by the children themselves, and a full presentation made on 'Our village water conditions and what might be done for a clean village water supply'.

Of course, these games and the whole procedure expect much of the person who sets them up. A campaign will be required to back them up, with an orientation and practice sessions, sponsored by the education, welfare or health authorities.

Variations can be prepared or experimented with on subjects like malaria, nutrition (what is available or cheap in the market week by week), agriculture, irrigation, forestry hus-bandry, transportation and marketing.

What has been illustrated is a child-contribution approach to planning.

However, the principle is the same even where an adult group is to take responsibility rather than the children.

The community, through a working committee, should begin to look at itself by stating its present situation: the need as it experiences it; its present resources; the way in which the new resources which the programme might make available will make a difference, and as far as possible, spell out these differences in terms of targets.

Self-surveys

Such a piece of work could be in the form of a 'self-survey' and this would require the development of a community-orientated 'How to . . .' guide. In this case it would be 'How to examine your water supply and water-related needs' guide. The survey should clearly arise directly from the *community's* need for information as a preliminary step in planning. Of course, the information can be shared with others, but should fundamentally reflect what the people of the particular community need to know. They should be able to see the purpose of asking each question.

A whole range of 'How to . . .' guides are needed to help the community develop itself in different areas. 'How to . . .' guides should tell of the real experience of other communities, what arrangements worked, what problems were run into, how they were overcome, what to take into account, advantages and disadvantages of different solutions, checklists.

This material should be carefully put together, and geared to the level of literacy and comprehension of the

community. Beginning kits available piece by piece, to be provided as and when required, could be worked on by the community worker trainers, and skills in using each piece of material developed. As more and more actual experience is accumulated, the mat-erials should be updated and made more effective for each job in hand. The inspection of the village is a first step in helping to organize 'bottom-up' planning.

Drinking water specifically for health purposes is likely not to be too high on the priority list as far as the rural community is concerned. How-ever, the coming of water is full of drama and very visible. Unlike many development activities, the product, water, is swift to follow the activity; there is the excitement of rigs, strangers, strange noises, sights, smells and activity, and (God and geology willing) suddenly there is water where there was none (or less) before. The excite-ment and interest aroused by water and these happenings *can and should be the stimulation upon which much else in development can ride.*

Entry points

We must learn to use such starting places as the coming of a water supply to reach into opportunities for establish-ing the *foundation* for all development activities. As I see it, one rural-based problem is related to all the others and the foundation for change rests on assisting communities to experience the benefits of partnership which lead to the discovery of their own ability to organize themselves, planning, and getting things done in successful col-laboration with others. With each achievement they find they have an increased capacity for development. This kind of community cohesiveness, growth of community skills and trust of outside agencies are important resources in their own right and can be considered as development *capital.*

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