



WEDC

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## Community self-help in the provision of drinking water

### Introduction

Community self-help has long been recognized as a strategy which can effectively be adopted to complement government efforts in forging local development. In the area of water supply, community initiatives can be very important not only for health purposes but also for community economic upliftment. It is in recognition of this that communities are expected to contribute in making the International Drinking Water Supply and Sanitation Decade (1981-1990) a success. In this regard, an earlier observation in one local government area of Nigeria showed that community development objectives and activities were not channelled towards solving the area's critical water shortage (1). This, it was inferred, might have been due to lack of awareness of need or difficulties arising in drawing out areas of priority among a host of perceived needs. However, a more recent observation from another nearby local government area shows that community development efforts have in fact been made to focus on provision of water to alleviate the problem of water shortage in the particular locality. It has represented a success story which idea may be used in other areas possibly with modifications according to local peculiarities.

This paper therefore sets out to relate the history and experience of this community water dam project in terms of organization, financing, technical input, government involvement, as well as identify the general motivating factors.

### Background

The community observed is Igboho. This is a town located in the extreme northern part of Oyo State of Nigeria. According to the 1963 population census, Igboho had a total of 46,776 inhabitants (2); and using the officially recognized annual rate of growth of 2.5 per cent, 1984 estimated population of the town is 113,994. Compared with other parts of the state, the northern area where Igboho is situated - is generally recognized as among the least developed in terms of size and distribution of infrastructure, social facilities and industrial establishments. Of particular significance is the problem of

water shortage in the area. This is occasioned by the fact that the area lies within the drier zone of the state. Average annual rainfall is 125 cm as against 200 cm in the wetter southern zone. The rate of run-off is high consequent upon the relatively higher altitude of the area which is about 500 metres above sea level as against 300 metres in the south. Inhabitants are faced with more serious water shortage in the dry season (November - March) when the traditional shaft open wells get dried up and distances up to 8 km have to be covered daily in search of spring or brook water.

### Initiation of Water Project

The origin of the water dam project can be traced to the activities of a Young Farmers' Club (YFC) which existed in Igboho in the 1960s. The leader of the group - a school teacher - had advised on the desirability of building a fish pond in the vicinity of the town. It was argued that fish yield from the pond would constitute a source of revenue to the club and that production of more fish would improve the protein contents of the people's diet. Members of the club intimated their relatives about this proposal; and the issue had to be taken to the meeting of Ifelodun Omo Igboho (IOI) - a community association of the traditionalists, which had long been pre-occupied with the issue of finding solution to the problem of community water supply.

Meanwhile, there was an unusual incidence during one of the dry seasons: A pregnant woman who went out at dawn in search of water had failed to return home. Her body was discovered somewhere in the bush after two days of search. This seemed to be the last straw that broke the camel's back. The IOI had to do something and therefore approached the Igboho Literate Union (ILU) on what could be done to the community's perennial water problem and the desirability or otherwise of a fish farm. The ILU at the instance proposed the building of a dam where water could be obtained all year round. This has in a way followed the YFC's proposal to build a fish pond even though

well).

12. Mr NYUMBU wished to know the reason for painting the vent pipe white on the Lesotho VIP latrine. He also queried the availability of corrugated iron sheeting for the superstructure of VIP latrines in rural areas of Lesotho.
13. Mr JACKSON replied that research had shown that the colour of the vent pipe was unimportant. He confirmed that the Lesotho VIP latrine superstructures have adequate ventilation. The latrines are made in the towns; materials were readily available in the Rand monetary area - without the need for foreign exchange.
14. Mr MBWETTE asked for details of any research into the pros and cons of covering the squatting hole slab. He commented that research had shown that the influence of the colour of the vent pipe was minimal in comparison with the suction effect of wind over the vent.
15. Mr AGGARWAL replied that research had shown the covering the hole would stop the ventilation circuit, so the hole should be left open at all times.
16. Mr EDMONDSON queried the costing of the Dar es Salaam latrine and challenged the ability to construct and install it at a cost of 4500 TAS. He also requested methods of procedure if, whilst acceptable from an engineering point of view, a 22 m slab was unacceptable from a social and community point of view.
17. Mr AGGARWAL assured Mr Edmondson that, at 1985 prices, the cost of the latrine, if the exact construction sequence was followed, was 4650 TAS. This cost increased if a World Bank loan was taken out to purchase the latrine.  
  
With regard to the slabs, demonstration units in the Bugurini Area were in continuous use.  
  
Confidence could be developed by demonstrating both the strength of the slab (5-6 adults) and by presence of reinforcing chicken wire.
18. Mr BROWN stated that Africa was already saddled with mechanised emptying of sludge from septic tanks or pit privies and with the associated economic technical and organisational problems. He asked for clarification of the philosophy for the introduction of the mechanised system, other than the selling of high technology. Could not the issue of cultural 'manual handling' using wheel barrow cartage be an educational question?
19. Mr CARROLL answered that mechanised emptying of pits is not necessarily the only option. Indeed manual emptying, with long-

handled shovels or buckets, is potentially the cheapest option where it is socially acceptable: currently this is not in most of Africa. He therefore advised that, if mechanised emptying was required, methods and proven equipment are available. BREVAC has shown its robust, long-lived properties in service in Botswana.

20. Mr OMAMBIA commented that the tape-slide presentation had shown a zinc-sheeting VIP latrine next to a house built of local materials. He wished to know how appropriate and affordable were the VIPs in rural areas.
21. Mr JACKSON explained that the house cost was 6-8 times that of the latrine and that there was a long-standing trade in wood and zinc-sheeting latrines, regarded by most Basotho as the only 'proper' latrine. He added that USIT had merely sponsored an improvement in existing technology and commercial practice. The latrines were not affordable to all but were becoming widespread throughout Lesotho. As these latrines cost 1.5-2 months wages the people were obviously motivated, in both rural and urban areas in taking the responsibility for the provision and maintenance of VIP latrines.
22. Mr SWAI asked what were the provisions for the control of fly-maggots that may escape from the latrine pits.
23. Mr JACKSON answered that the pit is sealed all round by a zinc-sheet skirting; all 'insect life' is contained in the pit and assists with digestion.
24. Mr MUGONDO wished to know if transfer of the Lesotho VIP latrines was affected either by corrosion of the reinforcement or by the increased weight if the reinforcement was protected.
25. Mr JACKSON explained that the wood and zinc-sheet VIP latrine had an untreated wooden frame which did not deteriorate in Lesotho's dry climate and termite-free terrain. He acknowledged that this solution is not suitable elsewhere in Africa.