Community self-help in the provision of drinking water

This item was submitted to Loughborough University's Institutional Repository by the/an author.


Additional Information:

• This is a conference paper.

Metadata Record: https://dspace.lboro.ac.uk/2134/29825

Version: Published

Publisher: © WEDC, Loughborough University

Rights: This work is made available according to the conditions of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) licence. Full details of this licence are available at: https://creativecommons.org/licenses/by-nc-nd/4.0/

Please cite the published version.
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 organisation, 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 high 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 (I卢) on what could be done to solve the perennial water problem and the desirability of otherwise building 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...
in a modified form. The ILU’s proposal was
to have a dam primarily for water supply
and secondarily for fish farming. This
idea was bought by the entire community.

Community Organization

By early 1970s, serious discussions had
started about the challenges and prospects
of a community water project. As already
discussed above, there had existed the
necessary organizational resources in the
IOI, ILU and the YFC. All these have the
same basic objective of seeking through
practical ways the socio-economic develop-
ment of Igboho. However, the initiation
of the water project served as a uniting
force for all the community organizations.
In fact both the IOI and the ILU now merged
into 101 and adopted
the
name 101. It has
since become a mother union for every able
bodied person of Igboho origin whether
literate or illiterate, Christian, Muslim
or animist, male or female and whether
living at home or abroad. Even though,
there are presently other minor social
clubs, those are necessarily subsumed in
the mother union.

The IOI has an executive committee of
fifteen members. These are changed every
three years. The president, secretary and
treasurer must be based in Igboho; other
officers may not ordinarily be resident in
Igboho. There are branch unions in 48 other
towns in Nigeria, Republic of Benin, Upper
Volta, Niger and Togo. Two congresses are
held every year: the 'mini congress' which
is held in June and the 'major congress'
held in December. During the mini congress,
least 50 per cent of all levies are
expected to be in while the balance for any
given year must be paid by December. The
major congress lasts for a week during which
programmes of activities including religious
worships, social dances, lectures and
business meetings are accomplished.

On average, each able bodied person pays a
compulsory levy of N20 (£17.7 sterling) per
year towards community development efforts
(3). Voluntary donations of any amount
could be made in addition. Payment is
strictly enforced while enforcement is
assisted by churches, mosques, clubs and
branch unions. Defaulting members attract
such penalties as a personal sequestration until they have paid outstanding
dues. Since the resident community members
supply communal labour, they are expected
to pay 50 per cent of normal annual levies.
So, while a member who normally resides
in Igboho pays N10 per year, his counterpart
who lives in Lagos or Lome pays N20 per annum.

Two bank accounts are in operation. There
is the 'home branch' account signatories of which are resident in Igboho. This
account is earmarked for the day to day
running of the union or carrying out
phases of stipulated community development
projects. The other is the 'general union'
account signatories of which may be
scattered all over the country, indeed over
West Africa.

Description of Project

There were initially some wranglings over
the location of the project. Every
neighbourhood in the town wanted a location
that would minimize the distance its members
would travel to the proposed water source.
This prompted the intervention of a
neutral person - a technical man, in fact.
The Water Corporation was approached to
give the necessary technical assistance.
A water design engineer was therefore sent
to Igboho and having considered all
information at his disposal decided that
the ideal location was along Sanya River
at the north-eastern part of the town.
This helped to settle the wranglings once
and for all. And so, work began on the
project in 1974 through direct labour.

Officials of the state Ministry of Agriculture
and those of the state Water Corpora-
tion assisted in supervising the construc-
tion. By 1977, the earth damn had been
built. The table below shows some
technical details of the earth dam: As can
be seen from the table, a big body of

<table>
<thead>
<tr>
<th>Description</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of dam</td>
<td>233.90 metres</td>
</tr>
<tr>
<td>Deepest part of dam</td>
<td>3.00 m.</td>
</tr>
<tr>
<td>Approximate area impounded</td>
<td>101,115.00 sq.m</td>
</tr>
<tr>
<td>Approximate volume of water impounded</td>
<td>808,920.00 cubic m.</td>
</tr>
<tr>
<td>Design capacity of service reservoir</td>
<td>450,000.00 litres per day</td>
</tr>
</tbody>
</table>

water was impounded and this became an
invaluable resource to the community. The
water was not treated; however it served as
a steady source of water supply for drinking
and for other domestic uses. Nonetheless,
the project suffered a serious set-back in
1980 when the earth damn gave way. This was
attributed to the fact that the earth damn
had earlier shown signs of high rate of
seepage. In any case, no engineering
studies were known to have been carried
out initially to ascertain the strength of
underlying rock formation on which the damn
was built. Furthermore, it is believed that there was no proper compaction of the earth dam. What appeared to be the immediate cause however, was a baobab tree stump which was left in the mound during construction. When the stump got rotten, a weak point was obviously created which allowed water to seep and so led to eventual collapse. The Ministry of Agriculture and the State Water Corporation later came to the aid of the community in advising on how to get the mound back in shape. The community on its part now appointed a water engineering company to supervise the reconstruction. The dam was eventually repaired with two spill-ways built into it instead of the pre-existing one. The dam has since re-filled up and community members have continued to fetch its raw water for use.

**Government Involvement**

Government involvement has taken two forms. The first is through the Community Division (Self-help Section) of the state Ministry of Information, Social Development, Youth, Sport and Culture. This government department is responsible for advising and assisting communities on self-help projects, and it has been performing this role in respect of Igboho Water Project. Essentially, it has made available some grants to encourage the community. Since the beginning of the project up to impoundment, a total grant of N1,600 (£1,425) was made available to the community. Another N5,000 (£4,422) was budgetted to help the repair work when the dam gave way but this was not released.

A second aspect of government involvement has been through the regional water corporation. As earlier stated, this corporation was able to provide technical advice to the community of the ideal location of the dam. In addition, when the dam gave way, the Water Corporation collaborated with the appointed private company to put it in shape. In 1984, the government took a bolder step by getting much more involved in the project. It decided to undertake distribution of the water supply. No longer would people have to walk up to the dam site to draw untreated water, as the water would now be treated through a package treatment plan and distributed through communal stand pipes. At the time of writing this report, the corporation has awarded contracts in respect of the different aspects of the work as shown in the table below. Work has actually commenced on rehabilitation aspect of the work. A survey of the communities to ascertain the extent of distribution need has also been undertaken. With this combined efforts of the community and government, the people of Igboho will in no distant future be served with abundant and safe drinking water.

**Evaluation**

The Igboho Water Dam Project certainly had some technical problems to contend with, but its eventual achievement in water provision can be considered as a success in community self-help. It, in fact, represents a model to be encouraged in other areas of Nigeria and Africa in general. Here, it has been possible to see a good example of community initiative-taking, a demonstration of community enthusiasm, a manifestation of mutual trust between elites and traditionalists, and an effective cooperation between government and community. In particular, those motivating factors that are more significant include effective community organization and the influence of education. The type of organization observed in Igboho is such a sophisticated and powerful one that has continued to record high levels of achievement in other areas of community development outside the water project. Furthermore, the educated group in Igboho has provided the necessary leadership in community mobilization. This appears to accord with the assertion that in any community, "the ability to grasp ideas was a characteristic of those who had some education." These two factors provide the moving force behind the Igboho Community Water Project. The potential benefits this exercise may generate can be seen from the community side in terms of health improvement and general socio-economic development. The benefits can also be viewed from government side as representing substantial savings on financial resources as government cannot possibly be all things to all communities at all times.

<table>
<thead>
<tr>
<th>Water Description</th>
<th>Contract Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction of a well-type intake</td>
<td>98,000 86,671</td>
</tr>
<tr>
<td>Rehabilitation of existing dam and the impounding reservoir</td>
<td>76,000 67,214</td>
</tr>
<tr>
<td>Construction of the rising main reservoir</td>
<td>31,000 27,416</td>
</tr>
<tr>
<td>Construction of service reservoir</td>
<td>21,000 18,572</td>
</tr>
<tr>
<td></td>
<td>226,000 199,073</td>
</tr>
</tbody>
</table>
Notes and References


3. The rate of exchange for the Naira against the Pound Sterling as at February 1, 1985 is £0.8844 to one Naira. See the Nigerian Business Times, Monday, February 4, 1985, p.20.


Acknowledgement

We wish to acknowledge the assistance willingly offered by Mr. A. Adebisi (a businessman and an Igboho community leader) Mr. Alao (a civil engineer, also an Igboho community leader) and Mr. Akinfenwa of the Community Development Office, Oyo, during the information collecting stage of this study.