

From Water Committees to the Emergence of Water Users Association:

Phaladi, R.E, Lassalle, T. J, Mollel, N.M

Case Study in Mochlapitsi Irrigation Schemes, Mafefe ward, South Africa

ABSTRACT

In South Africa, the 1998 National Water act (Act 36 of 1998) launched an in-depth reform of water resource management. The act distinguishes national areas of water management from regional and local ones. New management entities Water Users Association (WUA) and Catchments Management Agencies (CMA) are to be established in order to achieve that purpose. The current paper is based on a several month action research process within the rural community involved in transforming its current management of small-scale irrigation schemes. Mochlapitsi irrigation schemes used to have water committee but they were not very effective and poorly efficient. The overall objective of the action research process was to support the community members to establish a Water Users Association (WUA) for Mochlapitsi irrigation schemes in Mafefe Ward covering three traditional schemes (Mashushu, Mantlhane and Fertilis) based on their respective existing water committees. A three step process was followed: An *institutional introduction* with sensitisation meetings with local leaders and organizations of mass meetings for all scheme members to identify the institutional challenge posed by the new policy; the *identification of existing* water committees and practices through visits and interviews. Water committees selected representatives to drive up the emerging process and report back to them. Water committees also discussed and drafted bye-laws based on concrete operational rules that were validated by representatives at the association level. *The Water Users Association emerging process supporting the core team of representative through drafting the constitution* and public meetings with all water users for feedback were organized.

In Ga-Mampa area, there has been a strong willingness of the local organizations to form a WUA. This could be seen by the willingness to respect new rules and changes that were introduced during the process. However due to changes in the government intervention, the association could not be registered. It is recommended that Government allows a clear registration process to take place regardless of its own intervention programme.

Key words

South Africa, Limpopo province, social management of water, irrigation scheme, transformation, Water Users Association

From Water Committees to the Emergence of Water Users Association:

Case Study in Mohlalapsi Irrigation Schemes, Mafefe ward, South Africa

1. INTRODUCTION

A Water Users Association (WUA) is a body registered by the Department of Water Affairs and Forestry (DWAF) in terms of section 92 of National Water Act (Fontenelle & Oosthuizen, 2002). Water Users Associations (WUAs) are co-operative like associations of individual water users who wish to undertake water-related activities for their mutual interest. Nineteen catchments areas have been set up within South Africa under the 1998 National Water Act. Within each area, a Catchments Management Agency will draw up a management strategy for the Catchments. In fulfilling their functions, the agencies are required to promote community participation, with voluntary associations of water users to be formalized as “Water users associations”, in an attempt to regulate the relationships between users and agencies (Fontenelle, 2002). Water Users Associations (WUAs) and Catchments Management Agencies (CMAs) are some of the frameworks supported by the National Water Act (Act 36 of 1998) as water management institutions.

Fontenelle, (2002) and DWAF emphasized that the broad role of a Water Users Association is to enable people within a community to pool their resources (labor force and expertise) to carry out water-related activities more effectively. Firstly, Water Users Associations enable members to benefit from addressing local needs in terms of local priorities and resources. Secondly, they can be represented in a mechanism through which Catchments Management Agencies (CMA) or the Minister can devolve the implementation aspects of the Catchments Management Strategies to the local level.

Ga-Mampa community, as other historically disadvantaged communities, has been involved in water related activities for many years. It established water committees to effectively pool the community resources to better manage the water resources. These water committees are barely efficient in meeting all the needs of the community to properly manage water. A Water Users Association could be used to improve the efficiency of these water user’s committees. Water Users Associations (WUA) will enforce a better control and avoid conflict in the community. WUA is an arrangement to manage water related aspects of the community in order to improve the rationale utilization of water resources. One of the particularity of the Water Users Association as compared to water committees, is that it has to be registered by the Minister of Water Affairs and Forestry, which implies that it fulfilled precise requirements that were met during registration process period

1.1. The overall objective of the study

The overall objective of the study is to describe how to establish a Water Users Association (WUA) for Mochlapitsi river irrigation scheme in Mafefe ward covering three traditional irrigation schemes (Mashushu, Mantlhane, Fertilis) based on their respective existing water committees, and to identify the factors of success and constraints in establishing new water management institutions.

1.2. The specific objectives of the study and research questions

To determine the roles played by water committees in small-scale irrigation schemes like Mashushu, Fertilis and Mantlhane.

To determine conditions which favor the evolvement of water committees into an effective and efficient Water Users Association?

To recommend and facilitate the formation of Water Users Associations in other similar small scale irrigation schemes.

1.3. Research hypothesis

The establishment of efficient and effective WUA involves existing water committees as a basis for social transformation to improve the utilization of water resources for irrigation and therefore increase the agricultural production that leads to a betterment of the livelihoods.

2. LITERATURE REVIEW

It covers all the information related to the researcher's study. For this study, it will be all information concerning the emergence of Water Users Association from existing water committee. Different sources were used and information used mostly are from South Africa as compare to the international information.

FAO, (1976) explained that originally associations of irrigation water users are among the oldest institutions established by man and still continue to be a useful means of developing and managing irrigation schemes. This is more supportive since water boards are still transformed into WUA for better participations in the management of the water resources. Also it provides a basis for improved and intergraded local management of water resources (Seshoka et al, 2004).

Water Users' Associations in the rural areas are voluntary associations of farmers and farmers' groups having the role of joint operations on the irrigation and drainage networks, of water resources management and of executing hydraulic, reclamation, water conservation and other activities. This information from Stein, (1997 p2 of 12) contradicted by FAO, (1976 p 2 of 9), because it is not necessarily that WUA's in rural areas are only voluntary, also it can be compulsory.

3. METHODOLOGY

3.1. Study Area

The study was conducted in Ga-Mampa on the upper part of Mhlapitsi River, in Mafefe ward, which is located 120 km South East of Polokwane, Capricorn district, Limpopo Province in republic if South Africa.

3.2. Action research process

The action research process was facilitated by the researcher who resided on site, in collaboration with the extension officer. Her participation in all events, formal and informal, linked to the emergence of the association was instrumental. A three step process was followed:

An *institutional introduction with* sensitisation meetings with local leaders and organizations of mass meetings for all scheme members to identify the institutional challenge posed by the new policy; the research's observation after first meetings was that the members were very positive and willing to explore how to establish water users Associations; the *identification of existing* water committees and practices through visits and interviews. Water committees selected representatives to drive up the emerging process and report back to them. Water committees also discussed and drafted bye-laws based on concrete operational rules that were validated by representatives at the association level.

The Water Users Association emerging process supporting the core team of representative through drafting the constitution and public meetings with all water users for feedback were organized. Farmer to farmer exchanges with other small-scale irrigation schemes were facilitated. Table 1 show the number of the selected farmer's representatives participated in the core process, Age, and the gender

3.3. Data analysis

Data collected was organized into themes formulated by the researcher. The research is qualitative; it aims at documenting all the processes based on participatory approach where diagrams, maps, observation and flip charts were used for diagrams and Maps. Data will be in the form of words from documents, observations, and transcript. Neuman, (1997) noted that the analysis proceeds by extracting themes or generalizations from evidence and organizing data to present a coherent, consistent picture. Workshops and meetings were recorded in sequences

4. RESULTS

The study came up with the important roles played by water committees in small-scale irrigation schemes when establishing a Water Users Association. Farmer's representatives from the water committee in different schemes do not have an experience about what ready they suppose to do in relation to their positions as representatives. So, they decided to attend the workshop about the role water committee supposed to play with the inputs from the researcher. Other members of water committees and twelve farmer's representatives held workshops, which were facilitated by the chairperson of the farmer's representatives. Workshop came up with the conditions for involving existing water committees in facilitating the emergence of an effective and efficient WUA.

4.1. Steps followed by the researcher on forming WUA

There are two ways of forming a Water users association. One way is through the state (e.g. Ministry) and the other way is through the public. WUA in Ga-Mampa formed by farmers themselves and steps to form that WUA differ to that one formed by the state. Research concerning the establishment of WUAs was done and the procedures followed by the researcher from University of Limpopo were as follows:

- Research on WUA Initiated by public members
- Initial discussion between the supervisors and the Researcher.
- Preparation of a proposal.
- Official meetings and workshops about the process of establishing WUA were held.
- Farmers from three different schemes selected their representatives from existing water committees to represent each scheme.
- Selection of the committee from farmer's representatives.
- It was proposed by the farmer's representatives to elect a committee of five leaders to perform the following roles: three males and two females
- Schemes representatives introduced to the community by the chairperson

Workshops on duties supposed to play by the members of temporary WUA and the conditions that can make the water committees to be effective and efficient were held. Workshop came up with the conditions for involving existing water committees in facilitating the emergence of an effective and efficient WUA and also the role supposed to play by the water committees.

Equitable representation in its membership in establishing WUA in Ga-Mampa was done as follows:

Six men and six women (as their representatives) are responsible for management of structure of all current and potential water users affected by activities of WUA, since they established that WUA voluntarily. Their water supply are so reliable to its member since they got water committee that transformed into WUA, which will be responsible to control water and they need sustainable and efficient service provision in response to the collective needs of its membership. It's thus why they established WUA. Farmers have effective interaction with International water management Institute through the researcher, since it supplied the researcher with funds for effective interaction. WUA in Ga-Mampa can be represented at high level decision making structure after registered.

Steps followed to form WUA in Ga-Mampa at Mafefe ward are not exactly the same to that one of DWAF, since DWAF has long process of establishing WUA. Different is that, according to DWAF, proposal must be submitted to the ministry in order to analyze it. In South Africa, at Thabina (Tzaneen), there was a WUA formed by the state but the community not government selected members of that WUA. In Ga-Mampa the community recommended and facilitated the formation of WUA. In Thabina, only one community from that area were responsible, while in Ga-Mampa all communities from those areas participated. Thabina is top-down approach. Unfortunately, because of lack of management, that WUA has collapsed. So, the convention of committees into WUA done by Thabina, as related to the one on this study there is a difference because thabina WUA was formed by the state. Difference between the water committees and a traditional social management of water and they use bye-laws and constitution drafted by themselves. New WUA is an association linked to the state in order to have a say. It is thus why committees from Ga-Mampa accepted to form a WUA.

4.2. Roles played by Water Committees in Mashushu, Manthlane and Fertilis schemes

The group of farmer's representatives and water committees themselves through their experience discuss questions and suggestions concerning the roles played by water committees. Members of schemes were expecting different roles from existing water committees. Water committee's members must know their roles before they are selected and they must have an interest in what they are going to do. The following points show the roles that must be played by the water committee.

- To ensure cohesiveness
 - To ensure unity and teamwork
- Water use management
 - To allocate water in the whole scheme
 - To prevent conflicts between water users during the process of water sharing
- Infrastructure management

- They ensure farmers to maintain canals by removing the weeds and stones.
- They ensure farmers repair water leakages when canals are broken
- To make sure that farmers rehabilitate the canal if it is broken.

The study proposed how a WUA blanket constitution and bye-laws could be adapted established by existing groups (as water committees) who are interested in establishing a WUA. It was adopted since, the committee and other farmers recommended and facilitated the drafting of bye-laws and the constitution

During various workshops, the core group identified 3 main challenges that each and every farmer has to face when cultivating a plot located on the irrigation scheme:

- Fertility management: fertility is quite poor and the yields are very low due to a lack of proper management of this issue; trials done by some individuals with the BASED/LPDA support show tremendous yield increase when manure or fertilizers are applied.
- Water use management: in spite of the recent rehabilitation of the intakes on the 3 schemes, water is not enough to allow farmers to have any reliable production during winter time. Many reasons can be evoked for the water scarcity but water management (waste of water, water sharing etc.) is definitely an issue to be addressed.

Scheme protection management: Cattle, donkeys, goats and some wild animals (monkeys, pigs,...) freely access the scheme during winter season and hamper agriculture development during that season.

➤ Twelve farmer's representatives came up with the strategies of drafting bye-laws and the constitution.

4.3. The following conditions which favor the evolvement of water committees into effective and efficient Water Users Associations have been listed by farmer's representatives.

- To meet regularly and to communicate with each other.

Meetings or short discussion must be held regularly so that farmers will have a say.

Meetings regularly will make farmers to communicate without fear from other farmers.

- To collaborate with each other at work and participate in meetings.

Farmers must work together without any problems, helping each other and farmers should have a say so that the committee will be able to make decisions.

- To contribute financially towards canal and fence management e.g. community can agree on monthly payment (collection of a certain amount of money for repairing canals and fences)

If the community agreed on monthly payment for repairing canals and fences, farmers should stick to the agreement without any complains. Fines for those who do not want to pay should work.

- To encourage each other to be committed to his/her work.

Farmers should know their goal and they should be committed on what they are doing. Also they should help each other, encouraging and recruiting others by giving them knowledge about what they know on schemes e.g. encouraging other farmers from other schemes to work together.

- To understand the objectives of the committee and to be committed to it. Committee members must know their roles as a committee. For example: the chairperson should know the duties that she/he is supposed to do
- To understand and accept the benefits flowing from their memberships.

Committee members should encourage other farmers to come with their decision, resolutions or suggestions on challenges or what they want to be solved

- To understand and be committed to the objectives of the scheme.

Farmers, who are involved in farming, should know and respect the objectives of the scheme, their constitution and follow the byelaws.

4.4. Farmer's committees and farmer's representatives recommended the following:

4.4.1. By-laws for Mashushu, Mantlhane and Fertilis schemes

Since farmers within the community agreed on using the mentioned challenges (fertility management, water management and Protection management) to form bye-laws, then they agreed on drafting the bye-laws. Some of the drafted bye-laws were used before, is just that they were ignored, but now all three schemes follow their new drafted bye-laws. The previous recommendations are to be translated into bye-laws as summarized below:

- Overall Supervision by a committee
 - Water must be controlled by water committee.
 - Water must be shared on a daily bases.
 - To group themselves in order to manage two to three secondary canals from main canals with eight canals.
- Enforcement by a fine system

- If someone has stolen someone's water, she/he must be fined R50.00, since they agreed that a farmer must use water at a time of his/her turn).

- Member's participation in maintenance works

- IF a farmer did not reported his/her absentees, then he/she must pay R300.00 if totally involved on building/ rehabilitating a canal

- If a person uses water although she/he didn't pay R300.00 then he/she will be sentenced by the Headman.

- If farmers are busy working on a canal and a farmers is absent, but reported their absentees, then he/she fined R10.00

- A fence sub-committee

- Fences must be controlled by a fence committee.

- If there is a loss of one fence pole or the pole in about to fall due to decay, it must be replaced by the farmers themselves.

- If someone cuts a fence, that person must be arrested and fined R100.00

- If someone jumps over a fence he/she must be fined R50.00.

- If there are animals getting inside the schemes, fines must be paid by the animals' owner per head as follows:

- Head of Cattle – R50.00

- Head of donkey – R30.00

- Head of goat – R25.00

The above bye-laws now exist in three schemes (Mashushu, Mantlhane and Fertilis) and they are approved by the local authorities around Ga-Mampa and everyone must follow these bye-laws.

4.5. Constitution for a common WUA (Mashushu, Mantlhane and Fertilis)

At this stage, the core team started to focus on the board of the association and what would be its roles and functions. The board is the executive body of the association. It carries out the task recommended and approved by general assembly (communities). In Mafefe ward, this body called Ga-Mampa Water Users Association Board. The board consists of Chairperson, Deputy Chairperson, secretary, Deputy Secretary, treasurer and other seven additional members.

The functions and responsibilities of the board differ considerably according to the types of association. Ga-Mampa board is a body, which controls the maintenance, administration and operation of the irrigation system. A chairperson of the board is appointed and he/she is in charge of the implementation of the decisions taken by the board.

Whether the board chose to execute tasks by itself or to delegate them to other people, it generally has to undertake the following: operating the irrigation network, contracting personnel to execute the work, collect water fees, negotiating credits for the execution of work, issuing shares to raise capital, convening the general assembly and all other functions inherent in the adequate administration of the system.

5. DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1. Discussion

In Ga-Mampa area, there has been a strong willingness of the local organizations to form a WUA. This could be seen by the willingness to respect new rules and changes that were introduced during the process. However due to changes in the government intervention, the association could not be registered. It is recommended that government allows a clear registration process to take place regardless of its own intervention programme.

In Ga-Mampa valley, the process of establishing a WUA started voluntarily, since water users expressed their will to be united and to work together. Farmers agreed that establishing a WUA would benefit them and address their needs. They want to achieve their objectives at the ward level, because working together using similar bye-laws under a common constitution will facilitate the enforcement of the byelaws. The WUA is to provide a unique forum for the communities to collaborate with each other and to realize their unity. Through the WUA, they will encourage each other and it will be easier to achieve the control of the proper use of water. Furthermore, such functioning will cover all three schemes. The idea of establishing a WUA based on recognized committees is to combine local recognition and legitimacy with official registration and legality, both aspects being necessary to ensure that the WUA be effective and efficient. One can expect that:

- i. WUA provides a mechanism through which a CMA or Ministry can devolve the implementation aspects of the CMS to the local level.
- ii. Farmers may want to formally establish their rights to water.
- iii. Legal status of some kind may be needed in order for the WUA to be eligible for loans. Farmers might want legal status to be able to enter into and enforce contracts or receive assets. These observations are consistent with those of Perret, (2002 p 4).

Three different neighbouring schemes have formed a WUA. Based on that, the temporary board members were elected in order to represent the water users. WUA will consist of all water users in the existing schemes. 12 member were selected as their representatives and the criteria for the selected were based on their farming systems, their experience and their attendance to the scheme meetings

The objective number one addressed on 3.2, where the roles played by water committees in Mashushu, Mantlhane and Fertilis were identified. The local organizations themselves (e.g. water committees, farmer's representatives) agreed to follow the roles drafted about their duties. The objective number three addressed on 3.4, where farmers and other local organization recommended on the byelaws and a constitution. The above-mentioned objectives were summarised in the summary of the results.

5.2. Conclusions

The results of the study show that almost in Ga-Mampa area, there has been strong willingness on the local organisations to form WUA. The success on establishing WUA showed by the changes introduced during the process. The changes introduced have been characterised by a role played by the local organisations, their representatives, researchers and the community as a whole. The changes come after initiation of establishment of WUA addressed on 3.1.

The establishment of WUA addressed on 3.1., shows clearly that local organisation's abilities and willingness (their expressed demand) is to over responsibility from the government for water resource management. The above information can be true because water committees accepted and agreed to change their behaviors on duties for development. It means that, this study encourages changes through iterative bottom-up long term process (approach)

Establishment of WUA in Ga-Mampa was done, where everyone in the community had a say at a certain time. However, it is also obvious that many functions have to be formed accurately and the process was focused on a tailored training programme. Then, people's hope was that their elected representatives will efficiently manage water for the benefit of each and everyone. The information can be true, because those representatives attended workshops on the duties they were supposed to perform; it means they already know what they should do.

The roles played by water committees and the conditions, which favour the evolvement of water committees into WUA, were mentioned in the results. Water committees in small holder irrigation agreed to perform those roles and to follow the approved conditions that favour water committees to be effective and efficient. There is a relationship between water committee and their in irrigation schemes. The relationship is that water committees should be committed on their work, because everything is in the workshops, meetings and works.

The relationship between water committee and the conditions that favour water committee to be efficient and effective is that they should be committed in organizing or arranging

meetings and workshops. Again should recruit and encourage farmers on contributing money to do some works e.g. monthly payment for repairing canals and fence. Through a regular consultative process, leaders will have to learn to be accountable to members who will confirm their support through regular elections as defined in the constitution. All workshops and meetings held on steps for establishment of WUA encouraged farmers from three different schemes to work together. The interesting part from this research is that all three schemes started to use drafted byelaws approved by the local authorities.

5.3. Recommendations

The following recommendations are made based on the results and conclusions of the study. They are targeted to the main categories of stakeholders

5.3.1. To farmers

Most of the farmers are still confusing the byelaws and the constitution. They do not know exactly the different between the two and also the need for drafting a constitution. Farmers that were selected in the steering committee should be made aware of what is expected from them. Being a member of a committee does not mean that you control other farmers, but that you lead that group according to the agreed constitution and byelaws. The researcher observes that most of the local organization's chairpersons were not aware of their right duties. They thought that their decision-making were always final with no moral accountability to their fellow farmers. This can be solved by proper training of the framers on what they should expect from their committees as well as mentoring the elected leaders. During the transformation process of water committee into a WUA, farmers must be aware of the criteria on selecting representatives, they must be hard workers and they should have played an instrumental role during preliminary steps of establishing the WUA.

5.3.2. To Village Extension Officer

Extension officer need to be trained on how to support a group to draft their byelaws and be familiarized with various models of constitution. It is crucial that they can disseminate this knowledge to the farmers in an effective way: Participatory Approaches can be used to insure that the group owns the process that is facilitated by the extension officer. Extension Officer must be aware of and follow the protocol of the different phases of establishing WUA. Due to changes in the policy, she/he should be timely updated (Knowing each and every step on process of establishing WUAs)

5.3.3. Other stakeholders: professionals and researchers from government, NGO's and research institution

Government should hold workshops, training modules related to the roles played by water committees in their irrigation schemes. The more committee members from existing local organisations (e.g. water, fence and scheme) are trained, the more they will be encouraged to work effectively and efficiently.

Government and other stakeholders such as NGO's, researcher institutions, must collaborate with each other in order to show people within the communities that they share a common vision of rural development. Researchers must be keen on documenting the current processes of transformation of water committees into WUA. Such documentation will be detrimental when scaling up the experience: farmers must see how they can benefit when they address their needs. This will encourage other neighbouring committees in the Limpopo province to form WUAs. People will look at the advantages of transforming water committee into WUAs.

Government officials must be conscious that a favourable policy is a crucial condition for conversion of water committee to WUAs. A policy that is based on the recognition that existing local organizations, when they were committed to their work can achieve the mission of the organisation. A conducive policy encourages members of the organization to refine their vision and become more united. So, a clear policy must state the conditions for conversion of water committees to WUAs to help the organization to achieve their goals. There is a need for partnership towards the development of rural communities. Government should encourages farmers from local communities who manage an irrigated scheme but who have not yet established WUAs that they still have a chance of grouping themselves with neighboring schemes in order to form viable water Users associations.

6. REFERENCES

DEPARTMENT OF WATER AFFAIRS AND FORESTRY. 2000. Water National Act News (various information pamphlets on the principles and implementation of the new water Act. [http:// www-dwaf.pwv.gov.za](http://www-dwaf.pwv.gov.za))

FOOD AND AGRICULTURAL ORGANIZATION. 1976. Associations of irrigation water Users, based on paper presented by the author at a workshop on irrigation management, in Canterbury, England.

FONTENELLE J. P. 2001. Water management decentralization in the Red River Delta, Vietnam: an uncompleted transition process towards local governance. Inderscience Enterprises Ltd. *International journal of water*, Volume 1, Nos 3/4

NEUMAN W.L.1997. *Social Research methods, qualitative and quantitative approaches, third edition*. A Viacom Company, United States of America.

PERRET S.R. 2002. *Water policies and small holding irrigation schemes in South Africa: A history and new institutional challenges*. Working paper 2002-19, Department of Agricultural Economics, Extension and Rural Development, University of Pretoria, South Africa.

SESHOKA J, DE LANGE W. J and FAYSSE N. 2004. The transformation of irrigation boards into water users associations in South Africa: Case study of Lower Olifants, Great Letaba and Vaalharts water Users associations. Working paper 72. Colombo. Sri Lanka: International water management institute

TABLE

Table 1: Representatives from the three schemes, their number from each scheme, gender and age.

Scheme	Total	Gender		Age groups (years)		
		<u>M</u>	<u>F</u>	<35	35-60	>60
Mashushu	3	1	2		3	
Fertilis	6	4	2		5	1

Mantlhane	3	1	2		3	
Total	12	6	6		11	1