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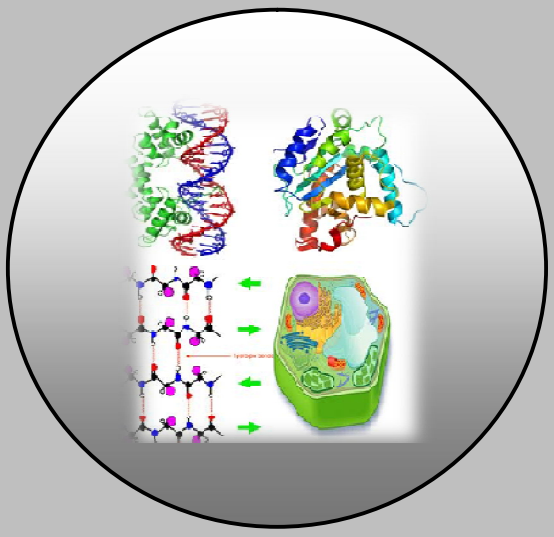

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REVIEW ARTICLE

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Community Participation in Integrated Water Resources Management in the Save Catchment, Zimbabwe

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ABSTRACT

Sustainable management of water resources is imperative for ensuring rural development in light of the national challenges posed by climate and demographic changes. Water resource management efforts in the Save Catchment appear to exhibit inapt practices, thereby heightening the vulnerability of the community to food insecurity. There have been increased problems over time that subject water resources to a number of crisis and pressures. Poor water resources management have stimulated and sustained a number of problems related to health, socio-economic and environment, which need to be solved. These problems are accelerated and magnified by the Save Local Authority, and individuals' struggles for economic and social development as many development initiatives are affected by water availability and vice versa. The research analyzed the importance of community participation in IWRM initiatives in the Save Catchment. The research used both qualitative and quantitative research methodologies. The research noted that water resources management cannot be successful and sustainable without the support and participation of water resource users and the promotion of participation in water resources management is long and time consuming process that requires appropriate means. Community water management in the Save Catchment requires a new management paradigm that considers water from a holistic, comprehensive and multi-disciplinary perspective which foster participation of all stakeholders at all levels of the process. Natural resources management related policies including water require the use of knowledge, experience and opinions of local communities who are the key stakeholders in resource conservation and community participation can foster better adaptation of management and policy responses to emerging water crisis.
Keywords: Sustainable Development, Integrated Water Management, Community Participation and Zimbabwe.

INTRODUCTION

The concept of integrated water resources management in Zimbabwe emanates from the relationship between nature, people and culture. It is based on the recognition that communities have interacted with the environment, developed valuable knowledge and experience that makes them the best managers of water resources where they live. The value of community involvement in decision making process lies in the improvement of people's quality of life and the inclusion of those people who have been historically marginalized such as the poor and women (Singh, 1992; Da Rocha Severo, 2002). In 1995, the Ministry of Lands and Natural Resources Management implemented an integrated watershed management that aimed at improving the conservation and management of watershed natural resources in order to enhance their use in sustainable economic production, and alleviating poverty and improving sustainable livelihood opportunities, particularly where local needs are met by water resources utilization (Dinar, 1994). IWRM sought to bring together fragmented water institutions and users into an integrated planning, allocation and management framework. At the inception stage, IWRM in the Save Catchment was perceived as 'an expression of a mature society' that understood that there was no unique and objective solution to environmental problems, but rather a multiplicity of different options that are compatible with both local knowledge and scientific evidence and capable of meeting the needs of both conservation and development (Callahan, 2006). However, a number of challenges have threatened the relevance and sustainability of IWRM initiatives at the grassroots of the rural society.

Local assessment of integrated watershed management in the Save Catchment suggests that most projects have not been successful in enhancing participation, rural food security and incomes. Some projects have not managed to provide even the minimum drinking water and fodder needs of watershed inhabitants, others have overlooked pastureland development and soil moisture conservation practices, and many have failed to arrest land degradation. Continued lack of drinking and irrigation water in several areas in the Save Catchment shows that drought proofing interventions have not generated significant downstream impacts (Rogers and Hall, 2003). Furthermore, the disappointing results in the Save Catchment are largely due to the flaws in the decentralization of watershed management programmes, financing and implementation mechanisms currently used by stakeholders. Fixed budgeting does not adapt to the wide biophysical and social economic variability among watersheds, and rigid adherence to guidelines prevents projects from sharing experiences and lessons. Water resources management projects' multiple objectives caused the local authority to channel limited investments into a range of on-and off- farm activities, often involving tradeoffs among the interests of different stakeholders (Bora, 1989; Bishop, 1970; Bell, 2001). Packages of measures, from building check dams to promoting income generation activities, are too large and difficult to manage, and the spreading of funds over many actions make actions slow to materialize and intangible. IWRM Projects in the Save Catchment often apply unscientific soil and water conservation methods, which decreased the cost effectiveness of the interventions. IWRM initiatives in the Save Catchment also lack sustainability and equity.

Projects in the catchment have no strategy for maintaining assets after the project support end; the only benefit that the communities derive from watershed projects is the possibility of short term paid work. Communities in Save Catchment see no long term benefits from projects, so have little interest in operating and maintaining project assets. In addition property regimes in the Save Catchment are incompatible with the 1995 watershed management guidelines. Land is inequitably distributed and ground water rights are bundled with landownership. Most watershed projects in the Save Catchment have a clear hierarchy of benefits and beneficiaries: those farm households that obtain improved irrigation benefit the most; other farmers obtain on-farm treatments such as field bunds; while those with no land or livestock benefit the least. Existing water management organizations are not successful in stimulating poor people's participation as they are unable to address their primary concerns such as a secure source of portable water, employment and access to water for agricultural purposes (Ester, 1993). Integrated watershed management in the Save Catchment will not achieve the intended objectives unless these issues are placed at the center of a participatory process and initiate negotiations among different stakeholders and beneficiaries to avoid conflicts.

STUDY AREA

The Save Catchment is situated on the southern part of the country. The area has a population of 120 000 and the area covers approximately 64 432 hectares (Central Statistics Office, 2012). The study area is in the agro-ecological region 4, which receives 250-350 millimeters of yearly rainfall. Vegetation consists of valley bushveld and pockets of Afro- montane forest and grassland vegetation, especially at high altitude. The area's main habitats are agricultural lands and rangelands that are home to 340 villages. The areas main habitats are agricultural lands and rangelands that are home to 230 villages. The farming systems in the Save Valley are dry-land; rain-fed and mixed crop-livestock and pastoral as defined by Callahan (2006). In the Save Catchment area, households rely on both off and on farm income and over the past decade household's copying strategies have been characterized by intensification of agriculture and off-farm activities.

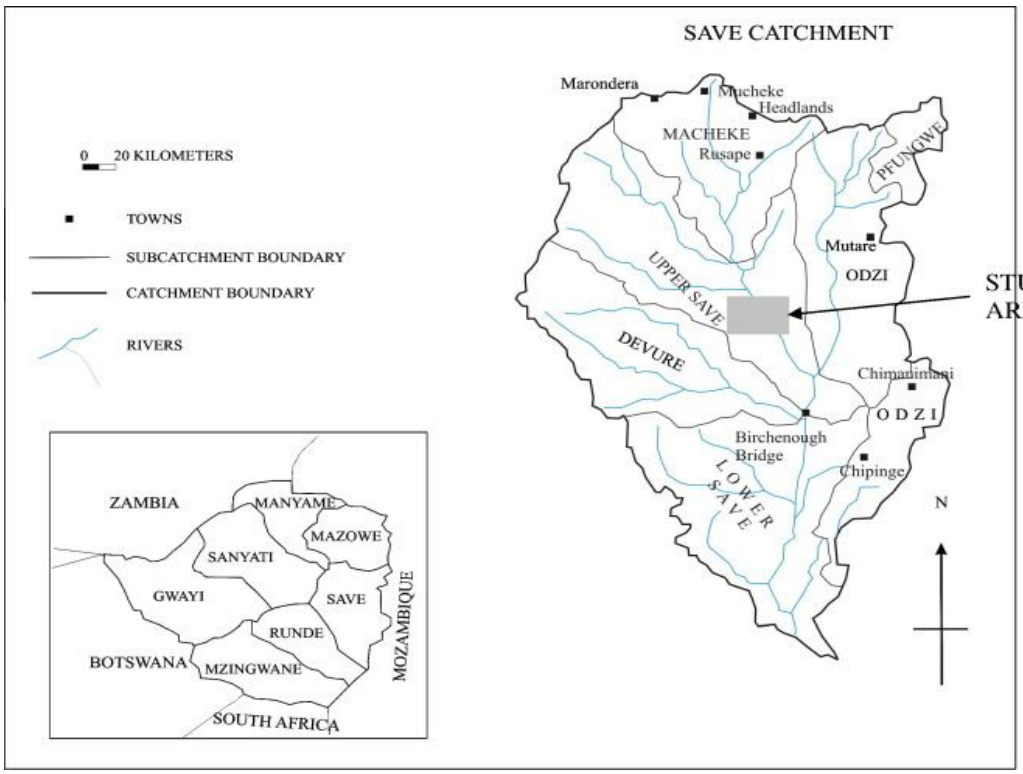
A worsening crisis in the availability of food and water for that fast growing population is unfolding in the study area and the food production capacity is being pushed to the limit with resulting over cultivation of fragile soils and loss of soil quality. Frequent droughts have aggravated the situation, but in the years of favorable rainfall; most of the households cannot produce enough food. Thus, integrated water management projects in the area identifies unsustainable farming practices as a serious problem and plans to protect the headwaters and introduce improved agricultural practices and alternative income generating activities.

LITERATURE REVIEW

Genesis of Participatory Development in Water Resources Management

Participatory development is defined as a process through which stakeholder's influence and share control over development initiatives and the decisions and resources which affects them (Bell, 2001).

Since the 1950's, the critical focus of conventional water resources management strategies has been economic growth and the top-down dissemination of growth impulses (Adams, 1994). The benefits of water resources management during this period were considered to trickle down to the needy population through a top-down process dominated mainly by major international institutions such as the International Monetary Fund (IMF) and the World Bank (WB) in collaboration with local Third World elites.



Source: Ministry of Lands and Agriculture Manual, 2010

Rogers and Hall (2003) note that national and international experts envisaged and premeditated water resource management programs from the outside without associating the people to whom these programs were supposedly directed and sometimes these people existed mainly in the abstract, as socio-economic indicators. As such, development analysts by 1970s began to notice that despite water resources management efforts of many countries, growth was not necessarily correlated with other water resources management objectives. Evidence was accumulating of growing unemployment and inequalities in income distribution among stakeholders in water resources management (Dinar, 1994). Indeed, by the early 1970s, it had become justifiable to argue that throughout much of the Third World growth was accompanied by increased inequality (Coward, 1990). Something was therefore wrong with the nature of water management led growth rather than the pace of growth as the crucial factor to development.

During the First and Second United Nations Development Decade (1961-71, 71-81), many theorists and practitioners of development argued that the focus should be on the ´animate` instead of the `inanimate` on human resources, as measured by quality of life considerations, rather than on material resources. New development approaches in water resources management were oriented toward the satisfaction of basic human needs and desires, particularly at the local community level. The approach encouraged local participation, and water resources management projects were expected to build development around people rather than people around development. Such alternative development concept is what Prato (1998) refer to as the birth of `Populist movements`. Similarly, Howe (1979) links this to the origins of the concept of ` community development`, which the British used to develop basic education and social welfare during the colonial days. However, participatory development really became an impetus in international water resources management projects especially with institutions like the World Bank by the 1970s (World Bank, 1995).

According to Diane (1994) in 1973 the World Bank, marked its commitment to this concept by adopting a new development approach termed `redistribution with growth` which targeted water resources management initiatives for the poor during the initial stages of development instead of simply relying on trickle-down mechanisms to eventually spread the benefits of economic growth. In parallel, the International Labor Organization (ILO) adopted a basic needs approach which was later formally adopted as the Declaration of Principles and Program of Action for a Basic Needs Strategy of Development by the World Employment Conference in 1976 putting focus on the basic needs of the poor (Bora, 1989). Such needs, according to Howe (1979), included minimum requirements of private consumption such as food, shelter, clothing; essential services of collective consumption such as water, sanitation, health care and education. He further stressed on the need for participation of people in decisions affecting their lives as satisfactions of basic needs within the broader framework of human rights. Furthermore participatory development concepts came up in the later part of the 1970s (Howe, 1979).

The Swedish Dag Hammarskjöld Foundation published a document in 1995 entitled *What now: another Development* calling for a humanist approach to water resources management and this was geared towards the satisfaction of basic human needs. Also parallel to this publication was the *Third System Project*, a bottom- up approach to development put forward by the International Foundation for Development Alternatives (IFDA) in 1976 in Nyon, Switzerland. According to Coward (1990) the Third System was dedicated to exploring new methods of raising consciousness and increasing participation by grassroots movements in water resource decision-making process. IFDA (1991) made a distinction between the First System of political power, which is dominated by the state, the Second System of economic power that is dominated by transnational capital and the Third System of people's power, based on voluntary organization, consciousness rising, and local action. The IFDA´s Third System is regarded the bedrock for values of participatory approaches in integrated water resource management.

IWRM as an Integral Component of Sustainable Development

Prato (1998) defines IWRM as a participatory planning and implementation process, based on sound science that brings stakeholders together to determine how to meet society's long-term needs for water and coastal resources while maintaining essential ecological services and economic benefits. The UNDP (2003), states that IWRM is a cross-sectoral policy approach to respond to the growing demands for water in the context of finite supplies. By aligning and integrating interests and activities that are traditionally seen as unrelated or that, despite obvious interrelationships, are simply not coordinated, IWRM foster more efficient and sustainable use of water resources to achieve the MDGs. It must be emphasized however that an IWRM approach will support not just achievement of the MDGs but also the long-term economic development, poverty reduction and environmental sustainability that will be needed to sustain that achievement (Ester, 1993). At the international political level the IWRM approach seems to have first been developed at the 1992 International Conference on Water and the Environment in Dublin and can be regarded as the vehicle that makes the general concept of sustainable development operational for the management of freshwater resources (Howe, 1979).

According to Coward (1990), IWRM assists in protecting the world's environment, fostering economic growth and sustainable agricultural development, promoting democratic participation in governance and improving human health. Globally, water policy and management are beginning to reflect the fundamentally interconnected nature of hydrological resources, and IWRM is emerging as an accepted alternative to the sector-by-sector, top-down management style that has dominated in the past. Many countries, including South Africa, have adopted stakeholder participation as a foundation for integrated practices within the IWRM arena (Dinar, 1994).

According to Olico-Okui (2004), the Brundtland Report defines sustainable development as "*Development that meets the needs of the present without compromising the ability of future generations to meet their own needs"*. It underscores that sustainable development should be linked to the goals of distributional equity and social justice within and between countries as well as generations. The above definition provided by the `Brundtland Report` of The World Commission on Environment and Sustainable Development (WCED) is more generally accepted as a working definition, because it addresses intergenerational issues, and echoes a basic political change in line with development agenda that secures effective community participation. Rogers and Hall (2003) argue that this definition addresses the issue intergenerational resource distribution, with expressed concern for the poor. Sustainable development must bring in basic political change in line with an alternative development agenda. The pursuit of sustainable development requires a political system that secures effective community participation in decision-making. This is best secured by decentralizing the management of resources upon which local communities depend and giving these communities an effective say over the use of these resources. It will also require promoting community's initiatives, empowering people's organizations, and strengthening local democracy.

However, Sustainable Development is a concept that grew out of the feeling that western patterns of development have ignored traditional society-nature relations within the south and inadequately addresses issues of social equity, ecological balance, and overall sustainability. Supporting this claim, Seckler (1999) argues that many water resources management projects typically initiated in the name of development and sponsored by national governments with loans from the World Bank and other international financial institutions have only been clearly beneficial to elite groups linked to these transnational institutions. Such groups have often used lobbying to further their interest within national and international development agencies. Meanwhile, the poor and disadvantaged have usually been excluded from the decision-making process and have borne the burden of the costs of these water resources management projects (White, 1996). Thus future communities will pay a heavy price for present unsustainable development, the benefits of which are currently being monopolized by an elite minority. It is against this backdrop that Howe (1979) suggests that attention has recently been focused on issues related to the sustainability of water resources management initiatives. An incentive to this was the 1972 report published by the Club of Rome entitled *The Limits to Growth*, which warned that life as we know it faces a sudden apocalyptic end if development practices are not dramatically altered to respect the earth's physical limits to growth (Bell, 2001). This concept of sustainability was further advanced via the works of theorists like Lester Brown (1981) and others at the World Watch Institute, who stressed that no international economic order could be viable if the natural biological systems that underpin the global economy are not preserved. The process gained greater recognition at a number of major international meetings, including the Stockholm conference on Human Environment in 1972; the 1974 conference on Patterns of Resource use Environment and Development Strategies, held in Mexico; and the World Commission on Environment and Sustainable Development report published in 1987 which gave birth to the historic United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, 1992 (Callahan, 2006).

Community Participation in IWRM and Poverty Alleviation

Due to the several shortcomings derived from top-down development efforts, participation has been recognized as an absolute imperative for success of integrated water resource management initiatives. The value of community participation in decision making process lies in the improvement of people's quality of life and those people who have been excluded in the ownership of natural resources (Coward, 1990; Diane, 1994; Adam, 2006). If public participation is conducted successfully, it will accomplish sustainable development and rectifying the inequalities of the past by offering stakeholders the opportunity to be involved in decisions that affect their lives. Sustainability and poverty alleviation cannot be achieved without community involvement (World Bank, 1995). Community participation is one of basic principles of IWRM. Nevertheless, community participation has remained an elusive concept. Singh (1992) argues that community participation has been given multiple meanings and connected to multiple methods of implementation in the last few decades and there is a feeling that there are still many unanswered questions about who participates, what they participate in, how they participate and for what reasons they participate.

Participation is a complex multidimensional concept involving different stakeholders. Da Rocha Severo (2002) suggests that participation in integrated water resources management emphasizes the decision-making role of the community. At the community level participation helps to improve the design of policies so that they correspond to the needs and conditions of the people to whom they are directed. Callahan (2006) makes a distinction between economists' definition of community participation, which is the equitable sharing of the benefits of projects; and social planners' definition as community's contribution to decision-making. A much more realistic interpretation of community participation is given by Abrahamsson (1997) who defines it as an active process by which beneficiaries influence the direction and execution of a development project with a view to enhancing their well-being in terms of income, personal growth, self-reliance or other values they cherish.

While many integrated water resources initiatives have been promoted by decentralization and participation rhetoric, in practice, they have generally been either tightly controlled by the state or outside development institutions. Most states still fear that grassroots organizations will generate popular empowerment beyond state control. Baslow and Myers (2002), states that the imposition of foreign concepts of participation in water resources management has undermined indigenous forms of political organization and democratic practice. Therefore, this has often reproduced paternalistic and authoritarian patterns of domination. In several cases of IWRM initiatives, participation that is not spontaneous but rather top-down or vice versa. Singh (1992) argues that spontaneous participation comes closest to the ideal mode of participation as it reflects voluntary and autonomous action on the part of the people to organize and deal with their problems unaided by governments or other external agencies.

Nevertheless, many development agencies in IWRM projects currently contend that participation is their objective simply in a bid to gain project favor or donor support, few have actually put effective participation in practice (Seckler, 1999). For participatory strategies to begin achieving their potential, the poor need to be genuinely empowered through fundamental changes to the status quo and the equitable distribution of power to all actors including the young people and women. Prato notes another distinction between participation as a means to improve projects results and participation as an end in itself. As Lindquist (1985) argues, more people will benefit and the outcomes will respond better to the needs of the beneficiaries with participation as a means to improve project results than with the later because people contribute their ingenuity, skills and other untapped resources. According to World Bank (1994), stakeholder participation describes a process, which aims to bring together all major actors in a new form of communication, negotiation and decision-making on a particular issue. Such a process should be based on democratic principles of transparency and participation, the recognition of the importance of achieving equity and accountability. It should comprise dialogues on policy, consensus building, decision-making and implementation of practical solutions (Adams, 2006).

Stakeholder processes have therefore emerged because there is a perceived need for a more inclusive, effective manner for addressing the urgent sustainability issues of our time. For participation to be effective, it must be broad based and involve all stakeholders including the young people equally into all the stages of the process. This is imperative for the success of any development initiative. The United Nations Summit on Environment and Development in 1992 and the subsequent conference report, Agenda 21, emphasized the protection of the earth's ecosystem, sustainable development, poverty eradication, public participation in decision-making processes, access to information, cooperation between states and peoples; social, environmental and economic interdependency, the vital role of women and indigenous people, the polluter pays principle, the inaction of effective environmental legislation, and capacity building (White, 1996). Agenda 21 set the stage for global transformation in an effort to create sustainable societies, bridge economic divides and eradicate poverty. Rapid deterioration in the quality and quantity of natural resources, present and potential environmental and socio-economic effects of global climate change, and the failure to eliminate poverty among the world's marginalized communities, has put pressure on governments to invest in developing solutions to the world's environmental problems. Governments recognize that the successful management of natural resources is complex and integrally linked to political, economic and social issues. In response, central governments have decentralized power to local government organizations in the hope that by drawing on the human resources within civil society, local resource issues can be dealt with more efficiently at a local level with the participation of local users (World Bank, 1994). Agriculture accounts for most land use in developing countries and is the principle livelihood of the rural poor. Subsistence farmers and other small-scale resource users are the key and often neglected stakeholders in IWRM (Dinar, 1994). A major challenge for IWRM stakeholders worldwide is the question of how to balance socio-economic and environmental trade-offs associated with water resource management decisions (Rogers and Hall, 2003) Decentralization is any act in which a central government formally cedes powers to actors and institutions at lower levels in a political-administrative and territorial hierarchy (Seckler, 1999). Janssen and Goldworthy (1996) assert that the complexity and range of dimensions of many IWRM problems means that they cannot be resolved by a single individual or discipline, but only through multidisciplinary teamwork. According to Seckler (2006), activities that promote sustainability of IWRM initiatives must be designed and implemented with the active participation of those families and communities who are struggling to ensure their livelihood in changing and unfavorable environments. Coward (1990) suggests that empowering people to participate in water resource management processes would give rise to immense political and environmental rewards while Rogers and Hall, 2003 assert that environment-sensitive organizations help bring about a greater convergence between citizen participation and technological development, because as the public become less satisfied with the impact of technology on the environment, community participation in complicated technological matters tends to become a more likely option.

Community participation in IWRM decisions is fundamental to achieve lasting solutions to meet the challenge of a development pattern striving to harmonize economics with social and environmental needs.

Benefits of Community Participation in IWRM Projects

Community participation processes are complex and pose various challenges to those involved. However, participatory initiatives also yield the following benefits:

*Reduction of apathy and psychological suffering***:** Participation in IWRM develops the individual's personality by making him/her aware that he is part of the total society, and therefore responsible not only to himself but to the society at large (Abrahamsson, 1977). Community participation activities reduce psychological suffering and overcome the apathy and sense of powerlessness of ordinary citizens, especially the poor. Communities' belief that they have the ability and competence to influence government planning and decision-making is increased via the participation process. Thus, participation increases the level of the actors with regard to the sustainable handling of water resources. This applies to the general public, for example in the management of water specific technologies, but it also concerns individual stakeholders who are introduced to other ideas through an intensive exchange of knowledge and thus leading to perceive the complex reality in a more differentiated way (Abrahamsson, 1997).

*Empowering Communities***:** Community participation in IWRM can serve as a means of converting dependency into independence by converting the poor from passive consumers of the services of others, into producers of those services. According to White (1996) the idea of participation as empowerment is that the practical experience of being involved in considering options, making decisions, and taking collective action to fight injustice, is itself transformative, and leads on to greater consciousness of what makes and keeps people poor, as well as bringing about greater confidence in their ability to achieve positive changes. Chifamba (2011) notes that it is only through community participation that decisions are made accepted by the community and eventually implemented.

*Information dissemination***:** In order to promote community participation in IWRM initiatives, optimal goal achievement and relationship building, the effective and efficient distribution of accurate information to the public is essential. Abrahamsson (1977) states that participation in IWRM informs and educates those who participate, thereby making them permanently able to defend their own interests. Thus, participation supports the integration of interests through an intensive exchange of information among concerned actors and lays the foundation for cooperation.

Challenges to Community Participation in IWRM Initiatives

Community participation is a complicated process and there are no straight pathways to success (Da Rocha Severo, 2002). There are various challenges which can affect the success of community participation process. Some of these factors are:

Manipulation of the process: When agencies (government and donor agencies) sponsor community participation in order to achieve their own goals, communities become mere endorsers of government plans without any significant empowerment of participants during the process. Only activities that support the implementing agency's goals are favored, while those that go against them and transfer power to the community are considered unsafe and discouraged. In this sense, according to White (1996), participation rather than exclusion is often the best means of control by those in authority.

*Low community participation***:** Hosting participatory initiatives in IWRM does not ensure that the community will participate and low levels of community participation are usually common. Reasons for non-participation in IWRM initiatives are various and include lack of awareness, lack of resources such as transport and time, as well as feelings of distrust and apathy among potential participants (Bell, 2001).

Potential for conflict: The potential for conflict is inherent in community participation and is seen as one of its major disadvantages. Because goals are largely undefined and people have different opinions on which goals are the most important and what the outcomes should be, conflict between community groups and conflict between community and public officials may result from the pursued goals of community participation. Some practitioners, however, view 'good conflict' as a means to bring about positive change. Howe (1979) asserts that while most people fear conflict and perceive it to be negative, "conflict offers opportunities for growth, reconciliation and change", and White (1996) also states that the absence of conflict in IWRM programmes should raise suspicion because change hurts.

Time, costs and benefits: Often the benefits of participation in IWRM are only seen in the long term while personal and financial costs are incurred immediately. Consequently, the poor view participation as too costly while government officials see the poor as only being concerned with the immediate gratification of selfish interests and not seeing the 'big picture' in terms of long-term benefits which may be accrued in IWRM initiatives.

Attitude of public officials: Public officials feel that they know what the community need and that communities are not qualified enough to participate in decision making (Diane, 1994). There is resistance to giving up control. Community participation in IWRM is seen as a threat to their expertise which they fear will be questioned by the community. As a result community participation is seen as cumbersome and a waste of time and money. This causes resistance among officials in establishing or becoming involved in participatory initiatives.

Participation mechanisms: Communities may become frustrated and discouraged from participating due to the establishment of inflexible institutional arrangements and work procedures designed for efficiency rather than responsiveness to community preferences (Howe, 1979). Because not all parties involved in IWRM initiatives are equal in their competency in terms of the way they express and organize themselves, as well as their access to information and finances, small groups of elites are often at the forefront of community IWRM initiatives while the majority of the community are unwilling to participate due to a lack of incentives. As a result the interests of the majority are not represented.

Community competence: In order to effectively participate in IWRM initiatives, the community has to display a level of competency to grasp the intricacies of the planning process, develop workable plans, ensure the effective and efficient application of public funds, and ensure that their participation benefits the entire community and not just the interests of the participants. Often people are not equipped with these skills and are subsequently not able to participate effectively (Bell, 2001).

STATEMENT OF THE PROBLEM

Poverty and unsustainable livelihoods in the Save Catchment have contributed to watershed degradation, and planning has failed to take more effective account of multiple linkages between poverty and water resource management. Integrated water management has not managed to bring the intended positive impacts on livelihoods and the environment. Land use activities in the catchment have degraded the ecosystem in ways that ultimately undermine the environment, human welfare and long term sustainability of human activities within the catchment. Without espousing proper catchment management to address issues of community participation, sustainability, equity and technical support the result is further ecosystem degradation and subsequent household food insecurity.

JUSTFICATION

The research gathered information on the impact of community participation on integrated water management, and explore options available for enhancing community participation in integrated water management. The research further proposed recommendation to stakeholders in integrated water resource management. These stakeholders include the government, Non-Governmental Organizations and quasi-government institutions such as district councils and line ministries. The findings will assist institutions to see the role of community participation in the success of integrated water management. Stakeholders will also realize the impact of unsustainable water management on the ecosystems and food security. The institutions will also find the research important since it will give options available for sustainable management of the catchment through integrated water management approach.

AIM AND OBJECTIVES

Aim

The major aim of the study is to assess the level of community participation in IWRM and document options available for scaling up participation to enhance livelihoods of people in the Save Catchment.

Specific Objectives

The following specific objectives guide discussion in this study: assessing the level of community participation in integrated water resources management to improve livelihood of people in the Save Catchment; evaluating the factors affecting community participation in order to reduce and reverse the rate of degradation of water resource base which is fundamental in maintaining effective productive systems, and generating recommendations for stakeholders in integrated water resource management which will assist in devising sustainable integrated water resources management approaches.

MATERIALS AND METHODS

This research used both primary and secondary data sources. The primary source was based on collection of some semi-structured interviews conducted in the Save Catchment. Interviews were conducted with the local fishermen, Rural District Council Officials (RDCOs), small-scale business men, farmers, employees and Non-Governmental Organizations. Multiple interviews were conducted and recorded on tapes, and each lasted for the average of 30 minutes or more depending on the participant's ability to articulate his views. Materials which include published journal articles, unpublished dissertations, internet materials and text books constitute secondary data sources. Qualitative methodology was used for this study and Grounded theory was selected because interviews constitute the main source of data. This method was first developed by two sociologists, Glaser and Strauss (1967) to generate inductive theories from data. It involves the use of constant comparisons and coding paradigm for conceptual development of theories. It is based on the premise that theory at various levels of generality is significant for gaining a deeper knowledge of a social phenomenon (Glaser & Strauss, 1967). The interview tapes were first transcribed with the aid of Express Scribe software. After the transcription was completed, an iterative process of coding began. Open coding was done using a highlighter to mark sentences or paragraphs giving it a code and at the same time writing the code name by the side of the paper. This was followed by axial coding in order to generate categories by grouping various codes around a common word with greater explanatory power. At the same time memos were written as records of analytic and conceptual meaning of words or statements. The process was repeated until saturation point or until a point where new codes or categories could not be generated. The emergent themes form the findings for the study that are presented and discussed.

RESEARCH FINDINGS

Age-sex

Respondents were drawn from both sexes but females constituted the majority compared to their male counterparts (66% as compared to 34%). The ages of participants ranged slightly below 25 years to 65 years. Data was collected from participants who are economically active and no respondent was in the retirement age group or a minor. The slightly below 25-35 years age group was the largest that constituted 36 % and the 36-45 years age group was the second largest constituting 28%. The 46-55 years age group constituted 23% and those between the 55-65 years age group constituted 13% of the total respondents. Table 1 shows the age-sex composition of respondents.

Table1. Age-sex Composition of respondents

Age group	Males	Females
Below 25-35 years	15	21
36-45	11	17
46-55	5	19
56-65	3	10
Total	34	66

Academic Qualification of Respondents

Respondents were drawn from varying educational background. It included those who had no formal education, those with elementary education, to holders of tertiary education. Generally the research showed that a number of respondents had acquired formal education, as 86% of them had acquired either vocational training after primary education or Zimbabwe junior certificate level of education; 49% had attained ordinary level. Only a few had no formal education (14%) which shows that the majority of respondents could read and write. However, the majority of respondents who were illiterate were females. The research noted that patriarchy has influenced women's educational achievement.

Marital Status of Respondents

The group comprised of people of all marital status since the single, married, widowed and divorced were included in the sample. The majority of respondents were single and they constituted 48%, and of this, 32% were females. The married also constituted a significant figure as they constituted 40% of almost equal males and females, (20% and 19% respectively). The widows were the minority as they constituted a combined 12% equally divided between the two groups.

PARTICIPATION AND DECENTRALISATION OF IWRM INITIATIVES IN THE SAVE CATCHMENT

The Save Catchment project focuses on developing the capacity of local communities, institutions and coordinating outside assistance to manage water resources in the Catchment. The underlying understanding is that improved farming systems (crop management, pasture, and fodder development, livestock management and organic farming) provide sustainable rural livelihoods and opportunities for adding value to farm and non- farm products and services. Key features of the Save Catchment project are managing the often competing demands on the catchment ecosystem, such as the water needs of agriculture, household, industry, livestock, forests, wildlife and tourism, and managing conflicts among social groups. Participation is promoted through community natural resources management projects, self-help groups, local knowledge centres and capacity building for local actors (Da Janvry and others, 2001). Technical backstopping is supplied through strengthened linkages among Save Catchment local authority, line ministries and the private sector institutions and companies. A participatory impact monitoring system is envisaged to enable the local authority and other stakeholders to make sound and timely decisions.

Before 1980, there was a single body which was responsible for both resources management and water services provision. The institutional arrangement was based on watershed administrative boundaries. In order to ensure availability of adequate water resources, the Water Act was enacted in 1982 as well as the IWRM strategy, which proposed institutional reforms that separated water resources management functions from water services function. The Water Act recognized the role of water users in the management of water resources at the micro-catchment level.

Zimbabwe National Water Authority (ZINWA) was established in order to manage water resources. ZINWA was tasked to work with water catchment boards. The research noted that the Water Act was instrumental in the separation of institutional services, the decentralization of roles and responsibilities, while laying emphasis on the participation of communities in water resources management.

Community participation in the Save Catchment involves holding community discussions and open forums between members themselves and with government and donor agencies involved in the advocacy and financing of environmental conservation initiatives. The study revealed that whenever the meetings are convened by the local authorities or donor agencies, the community plays a passive role. The local authority and ZINWA play a central role in project identification and implementation, with limited consultation of community members. Participant indicated that the benefits which accrue from IWRM are less than the costs they incur. The study noted that although IWRM projects reviewed included poverty reduction among their objectives, there is little evidence of any ex ante analysis of poverty that would have helped to improve poor people's livelihood. The poor in the Save Catchment are actually at risk from the IWRM initiatives. For example, the landless people who depend on common natural resources for their livelihood are suffering from conservation interventions, such as rangeland closure. However, targeting the poor has proved difficult, since efficient IWRM has to be inclusive of all stakeholders in the Catchment. The Save Catchment experience suggests that the best approach to water resources management is participatory, use of sound local technologies and equitable distribution of costs and benefits. In line of government policy, Save Catchment uses revenue villages as units of implementation, and work with local stakeholders to plan, design, implement and monitor interventions, prioritizing activities that strengthen local livelihoods. This is expected to assist in building a sense of local ownership. At the inception stage, the Save Catchment project emphasized on forging good institutional linkages. Actors were supported to provide long- term technical backstopping after project support has ended. However, stakeholders faced challenges in phasing out the temporary organizational structures and services that run the projects. Thus, sustainability issues became one of the major challenges when temporary organizational structures decided to pull out of the Save IWRM project. Although Save projects and plans include people's participation, it is not always clear that they implement it. One of the problems is that IWRM experts are finding it difficult to change their management-based, top-down method of working and do not fully understand the situation of the catchment. Local people continue to see themselves as the passive recipients of material assistance and find it difficult to enter into a new type of participatory relationship. What is slowing development is the failure to recognize local people and their associations as true partners.

FACTORS AFFECTING COMMUNITY PARTICIPATION IN IWRM IN THE SAVE CATCHMENT

Problems are surfacing in the Save Catchment where the Zimbabwe National Water Agency has played a dominant role in setting the technical standards and did not create an environment that motivates participation of the communities.

The dominance reduces the input from other stakeholders, thereby resulting in weak policy development, rigid technical guidelines, ineffective planning, weak ownership, and poor implementation. IWRM in the study area has not managed to empower and capacitate the local communities. There are questions over the sustainability of integrated water resources management projects and the incentive framework looks inadequate to guarantee that the local community will participate towards the conservation of the resources (Neves, 2002).

Community social groups such as women groups, indigenous people, and the aged face some distinctive structural impediments to their improved social and economic well-being and in their efforts to provide adequate water supplies. These include amongst others unequal distribution of resources and assets, skewed power relations, and a frequent dependence on the elderly or elite groups even though these elites may be responsible for the continuing oppression of the poor. In the Save Catchment, where poverty is particularly severe, land, water resources and other resources have become increasingly concentrated in the hands of the rich, thereby depriving the poor of any real opportunity to manage it. Neves, (2002) contend that broadly based rural development is impossible in most countries without fundamental agrarian reforms, including land redistribution. From the political point of view, there is a lack of the political will to fully incorporate poor in this process.

There is the general feeling of mutual suspicion and mistrust characterizing relations between popular movements like women and youth groups and the local authority. Olico-okui (2004) argues that "popular movements have tended to view the local authority as an adversary, dominated by elite groups aligned against the interest of the majority" particularly the poor people. The Save Local Authority still fear that grassroots youth organizations will generate popular community empowerment beyond its control. Consequently, Jill (1993) notes that projects whose objectives include capacity building, effectiveness, and cost sharing, but which in practice also result in empowerment, tend to be introduced by governments for specific political reasons linked to social and economic transformations at the national level, and to last only as long as those reasons are valid. It is contended here that the responsibility of poor people's group formation for instance women and youth water catchment unions have been placed within conventional bureaucratic control, therefore making the problems of poor people solved through the intervention of the local authority or older people. Perceiving poor people as passive objects upon which interventions must act, rather than as active subjects participating in the shaping of their lives and communities poses a number of challenges. It tends to be based on a range of negative assumptions about poor people that they are, at best, unable to take care of themselves and, at worst, responsible for crime and violence. This does not however underscore the fact that poor people themselves are responsible for some of the political or social problems that face them. Lake of resources has affected communities' ability to participate in IWRM initiatives (Neves, 2002). In order for rural communities in the Save Catchment to play an active role in the policy-making process, it is necessary for their members to have access to resources. These resources include adequate funding, government training programs, education, leaders, and volunteers to support rural causes and initiatives.

Many poor communities in the Save Catchment lack one or more of these resources, a situation which interferes with their ability to effectively impact the policy-making process. Having inadequate resources negatively impacts Save Catchment community's ability to effectively influence and develop policy compared to other players in the policymaking process. This creates an inequity whereby community organizations affected by policy change do not have the same opportunity to participate in and influence the process.

Lack of access to financial resources necessary to address problems and concerns of Save communities has led organizations in the Save Catchment to rely on volunteers to carry out community-based activities. A low population in other areas of the Catchment has resulted in the availability of only a small number of volunteers to carry out all the necessary activities demanded by their community organizations. This situation can lead to reluctance to become involved in the complex policy-making process. Even more difficult is finding individuals within rural communities with the skills, abilities and desire to initiate and champion rural policy development. Furthermore, there tends to be lack of programs to train, support and motivate new leaders and volunteers. As a result of a lack of these resources, some community leaders and volunteers face burnout that affects their productivity and progress in furthering the work to help their community. In addition, the loss of youth from Save communities has resulted in the depletion of potential future community leaders and volunteers.

Respondents indicated that they feel there is a lack of access to information about government programs and services. Rural poor people have also reported that the information that is available on policy, government programs and services is difficult to obtain and interpret. There is a desire to learn about and access information about government programs and services that is understandable, concise and timely (Diane, 1994). Another information challenge is the fact that little research has been conducted concerning rural communities and the policy-making process. Participants also indicated that they need access to information specific to the status of their communities. Once again, this information, if available, tends to be difficult to access and may be expensive. The relationship between rural communities and government is strained by the community perception that governments do not understand rural issues and impose policies and programs that negatively affect rural poor. Even worse, there is sometimes not even agreement among key policy makers that circumstances in rural communities are problematic and deserving the local authority attention (Ojungu, 1992). The local authority is also seen as sometimes downloading responsibilities on rural communities without providing the necessary resources, such as financial support, educational programs. Furthermore, rural community members are frustrated and discouraged by rejections of policy proposals by local authority and ever-changing program criteria. From the perspective of rural communities, the attitudes and action of the local authority have created barriers to working together to affect policy to improve the health and sustainability of rural communities. Community members often perceive government priorities and programmes as detrimental to their community's health and sustainability. These perceptions have created a barrier to community involvement in the policy-making process.

RECOMMENDATIONS FOR PROMOTING COMMUNITY PARTICIPATION IN IWRM

Participatory water resources management processes in the Save Catchment must be based on shared knowledge. Stakeholders should work towards building grassroots organizational and financial capacity. The government and donor agencies should introduce service, economy, environment and democracy (SEED) approach to prioritize the activities in the study area. Ideally, stakeholders should prioritize activities that provide services, promote production, protect the environment and protect democratic norms.

The research revealed that the beneficiaries in Save Catchment are not the only important actors in participatory water resource management. Collaboration between integrated water resource management programmes and civil society is now increasingly mediated by a variety of institutional actors, including legally recognized user groups, unions, associations, local administrations, line agencies, non-governmental organizations and private companies. As these actors have diverse and sometimes conflicting interests and concerns, the main goal of participatory integrated water resource management should shift from awareness raising and social mobilization to negotiating and partnership. Since decentralization assigns a pivotal role in territorial management to regional, district and municipal administrations, local governance has therefore become increasingly important for water resources management. Administrative decentralization offers interesting opportunities for the new generation of integrated water resources management programmes, but there are constraints to working with local authorities and civil society institutions (Pretty, 1995). It is often easier for local authorities to devolve powers to lower units of government than to ensure that those units have the resources, capability and accountability necessary to fulfill their new functions. There is therefore a need to enhance the capacity of local governments and civil society actors to deal with technical issues. It is difficult to deal with the wide variety of situations that are brought about by the participatory approach, even when it is properly implemented (Olico-Okui, 2004). There has been a shift from top-down approach, based on providing services, to one that gives priority to individual demands. The government is disengaging and this can leave a vacuum that may have adverse effects on communities. Giving priority to local people is a good step, but many people are now being called on to make decisions without seeing the broader picture. To avoid some of the dangers of participatory approach, decentralization has to be strengthened; the intermediate levels need the means to provide an interface between national requirements and local expectations (Almond and Verba, 1963).

The most successful IWRM initiatives to date have been those where stakeholders were partners in the research process at all the stages of identification design, implementation, and evaluation, and technologies were offered as a range of choices to be adopted rather than as prescription (Mc Legan and Nel, 1995). The lesson of experience on IWRM is that potential technological strategies should be tested through on-farm research where stakeholders are supported to adapt the technologies to the site specific conditions. This step by step process of technology development allows labor and input costs to be spread out over time, reducing the risk of stakeholders.

In IWRM initiatives, technological choices should be offered as principles, methods, components, and as a basket of choices to be adopted, rather than as prescriptions (Hilderling, 2004). Stakeholders should be given training and support in innovating, in evaluating results and in disseminating lessons. In general, project should work closely with stakeholders on the lookout for indigenous innovations already occurring and be ready to build on stakeholder's ideas and practices. The study revealed that participatory processes in IWRM that do not take account of local dynamics or do not genuinely empower local communities cannot achieve set goals. In the study area stakeholder interests and the local social organization are not sufficiently understood and taken into account. Villagers are not given full responsibility for establishing IWRM plans. As a result, ownership was weak and the eventual sustainability of the activities was compromised. In other cases, stakeholder organizations did not survive beyond the end of the project. Lack of economic incentives and lack of technical capacity are typical causes. Furthermore, a participatory and partnership approach in IWRM requires careful institutional organization up front to coordinate research agencies at various levels and to factor in other stakeholders, including farmers and the private sector (White, 1996). The coordination of research in IWRM should be encouraged at national and local level. The division of responsibilities between the various agencies involved in the IWRM initiatives needs to be clearly defined to avoid gaps and overlaps (Neves, 2002). Key requirements for success in implementing IWRM initiatives in the Save Catchment are careful sequencing, inclusion of all stakeholders, political commitment, public agencies that understand the rationale and process of participation, and sustained capacity building at all levels for both stakeholders and public agencies. Community participation in IWRM needs careful design and implementation if it is to achieve its development and distributional outcomes (Janseen and Goldworthy, 1996). In addition to well-thought-out and equitable rules at the design level, several factors are important at the implementation level. The sequencing of activities can be a decisive factor in the success of IWRM initiatives. The inclusion of all stakeholders in the participatory processes will be important for ensuring equity and sustainability, and mechanisms may be needed to ensure the inclusion of women and marginal groups (De Janvry and others, 2001). There is urgent need to ensure incorporation of local knowledge into IWRM projects as well as necessitating interdisciplinary and multidisciplinary approaches. Though community participation is emphasized in IWRM initiatives, in many cases local communities and their local knowledge are ignored by planners in developing and managing water resources (Lindquist, 1985; Ester, 1993). Dinar (1994) emphasized the need for taking indigenous knowledge on board when planning, developing, and implementing and managing IWRM projects. Experiences and knowledge of local people, though lacks scientific explanations, are a strong weapon in solving local problems. Research in local knowledge could ensure community participation, and indigenous/local knowledge could be used to facilitate development of IWRM projects that are environmentally sustainable and meets save community development objectives (Adams, 1994). These observations suggest a holistic approach that takes on board the interest and needs of the local communities.

The involvement of local communities and utilization of local knowledge in project design and implementation could assist in resolving the anticipated conflicts (Dinar, 1998). Such a situation could build trust between stakeholders and partners, and develop a sense of ownership and responsibility among local communities. There are several ways to get the community involved in the IWRM initiatives. These include, public hearing, notice and comment procedures, and use of advisory committees. Janseen and Goldworthy (1996) emphasized the importance of identifying activities that need to be performed by local communities and how those activities would contribute to the IWRM. This would also reduce conflicts and ensures a smooth implementation of the project. However, when assigning different tasks to the local communities it is important to take into account their ability in terms of education, awareness and economic status.

Since IWRM in the Save Catchment exerts diversified effects on socio-economic, cultural, physical, and ecological conditions, water resources management should inevitably involve multi-objectives tradeoffs and ensures that multidisciplinary approaches and interests of varying groups and stakeholders are accommodated (Howe, 1979). One of the main reasons for ensuring community involvement in IWRM is to reduce conflicts and help projects to achieve the intended objectives. Water use conflicts are especially noted between farmers (irrigators) and livestock keepers, irrigation, hydropower production, farming activities, and domestic uses. The increase in intensity and severity of the conflicts necessitated the intervention of the Government. Though there have been calls for negotiations to resolve the conflicts, none of the project staff considered negotiations between water users as a potential conflict resolution strategy. Instead, the main call was for the government intervention to stop local communities from using the river water.

CONCLUSIONS

The study revealed that the involvement of local communities in water projects does not only ensure democracy, but also ensures acceptability, support, and sustainability of the respective projects. The concept of bottom-up planning necessitates participatory approaches and involvement of local communities and other stakeholders from the grassroots level. This approach is the best option to IWRM because it ensures public trust, awareness and interest. The paper emphasized that getting the public involvement should not be taken as a way to negotiate after a protest, but rather as a right and necessity. Community participation should be considered as mandatory in any development project and local communities should be viewed as equal development partners who should participate fully in the design, implementation and benefit sharing for any water related development project. Such involvement could minimize conflicts. IWRM should ensure that local communities' voices and interests are heard. This means empowering local communities with the necessary tools to take care of their own welfare by ensuring that their voices are heard, and their interests are adhered to.

As the Save Catchment move towards decentralized, participatory governance and sustainable development, IWRM and poverty alleviation initiatives, it is becoming clear that these cannot be achieved in isolation from each other. However, there is the threat that participation may be used merely as a means to realize the objective of government officials and professionals rather than the empowerment and development of poor communities. The potential challenges and benefits of participation in development initiatives are various and determined by many factors, including the objectives of the initiative as well as the attitudes and experiences of the participants themselves. While the ideas on participation and participatory processes are ample and diverse, putting them into practice to achieve a significant betterment of communities remains the biggest challenge. In IWRM issues such as accountability, cooperation and the diffusion of power, play a crucial role in this process.

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