

Participation Index Analysis for CRDP at Muyexe in Limpopo Province, South Africa

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ABSTRACT The present study investigated the level of stakeholders' participation to find out how relationships are maintained among the beneficiaries of Comprehensive Rural Development Programme (CRDP). A simple purposive random sampling technique was used to select 300 respondents from the various CRDP projects for semi-structured questionnaires. The stakeholders' participation index was developed that displays the participation is high in benefit sharing (PI= 0.6) but low in other key areas of study. Participation in council of stakeholders interaction was the least (PI= 0.1). The mean age was 35.5 years and the mean income level was R1000. The beneficiaries were food secured since they reported an increased food production change 45.5% and increased food consumption change 45.9%. Policy makers should involve the stakeholders in project designing and implementation as early as possible to give equal attention to perspectives.

INTRODUCTION

An incredible divide exists between the rich and the poor in the South African economy. It is important to note that the increasing differences between haves and have-nots generated by past developments are not restricted to the widening gap between rich and poor (Kuhnen 2010). As stated in the Rio Declaration, 'environmental issues are best handled with the participation of all concerned citizens, at the relevant level', while organisations such as the United Nations Development Programme (UNDP) and the Global Environment Facility (GEF) have increasingly promoted stakeholder participation (Aggrestam 2014). Stakeholder participation refers to the active involvement of various stakeholders in defining aims and objectives of the project, determining beneficiaries, managing resources, resolving conflicts, and monitoring and evaluating the performance of projects (Alhasan 2010). Participation could be defined as a process in which the target group members take an active part in planning and decision making,

implementation and evaluation (Mascarenhas et al. 2014). It will leads to increased sharing of benefits and decision-making power in the development context; it materialises in that people or groups of people access skills to analyse their living conditions, to plan for themselves and that they are enabled to act; it means social processes that take place within certain groups or collaboration networks and beyond them; it is not an end in itself, and should not be seen in isolation (Krank et al. 2013; Sherman and Ford 2014). The multidimensional nature of participation concept has been identified by a number of authors (Rowe and Frewer 2005). The implementation of participation requires flexibility and process-orientation to put people in the centre and promotes collaboration for mutually defined objectives.

A national collective action, known as Comprehensive Rural Development Programme (CRDP) was introduced by the government to fight poverty, hunger, unemployment and lack of development in rural areas of South Africa (The Presidency 2009). This programme was designed to improve the status of the poorest of the poor who live in the rural areas. In this study, the researcher seeks to assess the impact of food security and the quality of life of the community in the study area.

The rural economy, in any society is driven by multiple activities that mirror the diversity of

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livelihoods of the rural population, the rural poor in particular. Rural development in South Africa is characterised by three distinct phases (Olivier et al. 2010). These are: Rural Development 1994-2000, Rural Development 2000-April 2009 and CRDP April 2009+. The CRDP was launched in August 2009 by President Jacob Zuma at Muyexe Village, Limpopo and the initiative has also been taken in Riemvasmaak in the Northern Cape. Government pledged over R2.6 billion in conditional grants to provinces to implement the programme over the medium term (Department of Rural Development and Land Reform [DRDLR] 2009a). This will be used for agricultural infrastructure, training, advisory services, marketing and for upgrading agricultural colleges.

The typology of participation (passive participation, participation in information giving, participation by consultation, participation for material benefits, functional participation, interactive participation, self-motivation and interactive participation) is determined by the traditions, including cultural rules and norms of social behaviour; political environment; local power structures and previous contact and interaction with development agencies. A critical part of the CRDP is to stimulate agricultural production to contribute to food security but also rectify past injustices through rights-based interventions and address skewed patterns of distribution and ownership of wealth and assets (DRDLR 2009a). The CRDP implementation will be extended to seven additional sites in the rural areas across the country, benefiting 160 wards by 2014 (The Presidency 2009). The Rural Development Framework, adopted by the Government in 1997, defined rural areas as sparsely populated areas in which people farm or depend on natural resources. Such dependency includes villages and small towns that are dispersed throughout these areas; they include large settlements in the former homelands, created by apartheid removals, which depend on migratory labour and remittances for their survival. While the word 'rurality' refers to a way of life, a state of mind and a culture which revolves around land, livestock, cropping and community (DRDLR 2010).

The CRDP is strategic priority number 3 (rural development) within the government's current Medium Term Strategic Framework (MTSF), 2009-2014. All the pilot sites were identified using the previous government programmes such

as Integrated Strategic Rural Development Programme (ISRDP), War on Poverty Campaign (WPC) and the definition of rural areas by Cooperative Governance and Traditional Affairs (COGTA). The pilot sites were identified from the nine provinces including Gauteng province. They are Muyexe in Limpopo province, Riemvasmaak in Northern Cape, Mkhondo in Mpumalanga, Diyatalawa/Mokohloko in Free State, Mhlonhlo in Eastern Cape, Dysselsdorp in Western Cape, Msinga in KwaZulu Natal, Disake/Matlametlong/Mokgalaneng in North West. Gauteng province is mostly urban areas but its pilot sites are to be identified in short course of time. The design of the programme is predicated on lessons learnt from pilot sites selected through socio-economic profiling, community participatory processes and intergovernmental co-operation (Parliamentary Monitoring Group [PMG] 2011). A great deal of baseline data has emerged from the first two pilot engagements in Riemvasmaak in the Northern Cape, and Muyexe in the Limpopo Province (DRDLR 2009b). The CRDP is therefore different from past government strategies in rural areas because it is premised on a proactive participatory community-based planning approach rather than an interventionist approach to rural development (DRDLR 2010).

From research undertaken in the ISRDS nodes, it is clear that there has been lack of co-ordination among the stakeholders (Olivier et al. 2010). A national stakeholder relations framework is non-existent. In addition, private sector engagement is weak. Current experience with implementation of the rural development programmes, however, indicates that partnerships of government with the private sector, Non-Governmental Organisations (NGOs) and communities is crucial in the implementation of the rural development projects (De Campos-Guimarães 2009).

Stakeholders have been identified as those on whom the project will impact (primarily the local native communities) and those groups or agencies that can impact the project. Stakeholder participation could be described as a process of institutional arrangements in which stakeholders are actively involved in different levels of resource management which include decision making, planning activities, projects and programs designs. The participation of stakeholders in policy-making is seen as an enabling in-

strument to successful policy implementation (Lang 2014). The present study adopts the World Bank (1986:1) definition of participation as a process through which stakeholders' influence and share control over development initiatives, decisions and resources which affect them. This group of people encompasses the tripartite partnership that is, the civil society, the private sector and the local community efforts to sustainably manage the projects. Participation need to be considered in decision-making, implementation, maintenance and evaluation of successes and failures for better assessment and understanding (Public Service Commission [PSC] 2008).

Sustainable management of CRDP projects is linked to participation of project-dependent communities in the management and the utilization of benefits to improve livelihoods. The study area was identified as one of the highly impoverished regions in South Africa (DRDLR 2009b). The baseline data collected showed high rate of unemployment, high level of crime, and lack of development in the area which has led to low level of quality of life among the people. Therefore, project management has to be positioned in the context of development of the area. Through participation, the development of the area as a whole will eventually enables the realisation of the goal of improved livelihoods and sustainable resource management (Alhassan 2010).

METHODOLOGY

The sample size for the study comprised of 300 respondents from Muyexe community and other stakeholders. This population included members of community based organisations and forums, school governing bodies, government (national, provincial and local), community policing forum, ward committees, traditional authority, men, women, youth and children.

The data collected was analysed by quantitative methods using the appropriate data analysis tools such as descriptive statistics to find the frequency distributions or the characteristics of the respondents, graphical representations and measure of central tendency of variables including standard deviation on the quantitative data. Indexing has also been used to measure the level of stakeholders' participation.

Responses to the questionnaires during the survey are coded for statistical analysis using the Statistical Package for Social Sciences (SPSS for Windows Version 21.0). The participation index analysis was fitted with the following relation:

$$PI = [(f_{vh} \times 1) + (f_h \times 0.8) + (f_n \times 0.6) + (f_l \times 0.4) + (f_{vl} \times 0.2)] / N$$

Where,

PI = Participatory index for CRDP projects,

f_{vh} = frequency of respondent with very high participation in a particular project,

f_h = frequency of respondent with high participation in a particular project,

f_n = frequency of respondent with normal participation in a particular project,

f_l = frequency of respondent with low participation in a particular project,

f_{vl} = frequency of respondent with very low participation in a particular project and

N = Total number of respondents for each stakeholder category.

The value of PI can be interpreted on a scale of 0 - 1, where zero indicates primary stakeholder has no chance of participating and 1 indicates constant participation. Increase in values from 0 - 1 implies increase in participation level of the stakeholder group with respect to the specific project.

RESULTS

The respondents' demographic characteristics are explained in Table 1. Out of the 300 respondents 72% were female. The higher participation of female in the CRDP projects is due to their engagement in various activities such as agriculture, brick making and community work projects. The trend is similar in most of the studies done on socio-economic development projects in Limpopo province. Most male counterparts prefer to work in the mining sector and in big cities while majority of the women are found working in the rural areas. Only 15-20% of local government employees are women and very few of them are in management positions (Education and Training Unit [ETU] 2010). The result also indicates a lower percentage of urban-rural migration. It was observed that most families in Muyexe own small parcels of land where they practice subsistence crop and animal farming as well as for residential purposes. The agricultural projects provided input packages and water tanks for backyard gardens which enhances their living conditions.

The relationship between the income levels of the participants and their primary occupation presented in Table 1 shows the type of farming category that they belonged to, changes in their production on the farm and changes in their household food consumption. A majority 63.1% of the participants have non-farming occupation as their primary occupation, with 28% being mainly engaged in crop farming and 4.7% being livestock farmers. About 46.4% of the participants were not engaged in farming, 34.5% of the participants were part-time farmers and 19% were full-time farmers. Most, 54.5%, of the participants had experienced an increased food production from their farms while for 43.9% of the participants, their farm production remained the same and less than 1% experienced decreased production change.

Only a very small proportion of the participants, 0.8% had experienced a decreased or negative food production change. An overwhelming majority of the participants, 98.4% had experienced either an increased or no food production change whatsoever. This could be due to the fact that many households in the village practice subsistence farming and majority of the respondents are beneficiaries of CRDP at the same time.

Most of the participants, 54.9% in this study reported that they have had an increase in their food consumption (Table 1). This could be because these participants engage in backyard

garden project which is an initiative linking access to adequate and healthy food, including vegetables and fruits; promotion of small family farms and their products. This ensures a constant flow of food and therefore food security of the participants.

Majority, 54.9% of the participants had experienced increased household food consumption, for 43.1% of the participants; their household food consumption remained the same and less than 1% experienced decreased household food consumption change. There was a statistically significant correlation between the income levels of the participants and their primary occupation ($\chi^2 = 11.630$, p value = 0.020), the type of farming category that they belonged to ($\chi^2 = 20.880$, p value = <0.005), changes in their production on the farm ($\chi^2 = 27.115$, p value = <0.005) and changes in their household food consumption ($\chi^2 = 27.890$, p value = <0.005).

The age of the respondents ranged from less than 20 to 70 years and above (Table 2). The study shows the largest age bracket of the participants in the various CRDP projects are between 21 and 40 years. This fall within the middle aged people while those less than 20 and above 61 years constitute the least participants in the projects. It was observed during the study that there are some youth less than 20 years of age who are participating as piece meal workers. They were employed by the project beneficiaries with specific assignments on which they

Table 1: Socio-economic characteristics of the respondents

	<R1000	%	R1001-R5000	%	Total	%	Chi-square	p value
<i>Primary Occupation</i>							11.630	0.020
Crop farmer	51	24.9	27	36.5	78	28.0		
Livestock farmer	7	3.4	6	8.1	13	4.7		
Government worker	4	2.0	0		4	1.4		
Trader	4	2.0	4	5.4	8	2.9		
Others	139	67.8	37	50.0	176	63.1		
Total	205	100.0	74	100.0	279	100.0		
<i>Production Change</i>							27.115	<0.005
Increased	40	42.6	32	84.2	72	54.5		
Remain the same	54	57.4	4	10.5	58	43.9		
Decreased	0		1	2.6	1	0.8		
Don't know	0		1	2.6	1	0.8		
Total	94	100.0	38	100.0	132	100.0		
<i>Food Change</i>							27.890	<0.005
Increased	41	40.6	38	88.4	79	54.9		
Remain the same	57	56.4	5	11.6	62	43.1		
Decreased	1	1.0	0		1	0.7		
Don't know	2	2.0	0		2	1.4		
Total	101	100.0	43	100.0	144	100.0		

receive stipend. The low level of participation of this category of people was due to the fact that many of them are still attending schools or have just left grade 12 and are waiting to enter a higher institution and as such their participation is only on a temporary basis.

Marital status was considered to access the time devoted to CRDP projects and household activities in communal areas. Married people among the respondents were able to share household activities such as agricultural production, herding of livestock, harvesting of fruits, fetching firewood and water. While households with single status, divorced and widowed heads had to perform all the household activities as majority of them do not have adult support except from children who were old enough to do some household chores. The study revealed that over, 42% of the project participants are married men and women while about 26% are single (Table 2). The rest of the categories (divorced, widowed and living together) were all of smaller percentages.

Table 2: Level of interaction among stakeholders

Rank	N=292	%	Mean	SD	Sig
Very Low	1	.3	4.17	0.72	.000
Low	3	1.0			
High	195	67.0			
Very High	93	31.0			

Significant level at 0.05

According to Oni et al. (2011) and Al-Ragad (2014: 414), the number of years spent in formal education is one of the important determinants of increased agricultural production, high level of performance and adoption of new technologies. Education catalyses the process of information flow and leads the farmers to explore as widely as possible the different pathways of getting information about agriculture and technology. Obadire (2012) also notes that illiteracy is one of the factors that limit economic, social, physical, technical and educational development in less developed countries. Educational considerations generally influence the adoption of new behaviour. In Table 2, the study revealed that about 65% of the respondents have secondary or vocational education, about 19% have obtained primary education, one person had tertiary education while only 10% are illiterates. Overall, most of the CRDP project partici-

pants have gone through some form of formal education or the other. This could be due to the constant awareness campaigns and sensitization of the rural communities on the importance of education programs conducted by the government in the past. The educational status influences their level of participation and being able to read and write are considered when the leaders of the project are selected.

The occupations of the Muyexe people were grouped into primary and secondary (Table 2). The primary occupations are categories of occupation involved with on full-time basis while that of secondary are regarded part-time jobs. Quite a number of the respondents are involved in both categories of occupations. Twenty-nine percent of the respondents are engaged in crop farming as their primary occupation while only about 5% are livestock farmers and government workers (Table 2). There are other primary occupations which about 68% engaged in which may include poultry, brickmaking, workers, hawkers, and so on. The low level of participation in agriculture was due to natural factors which include the poor quality of soil types, lack of water and low rainfall in the area.

It was observed that most of the respondents engaged in one or two occupations. This may be because some of them are engaged in certain business activities before they commence the CRDP project or they are engaged in the second business to take care of uncertainties. These groups also experience certain problems in their primary occupations such as, late payment of their monthly stipends or salaries, lack of water for their farming and businesses (Table 2).

The study used the participation index (PI) to measure primary stakeholders involvement in CRDP projects based on a five-point scale (very high = 1, high = 0.8, normal = 0.6, low = 0.4 and very low = 0.2). The values of index were kept within 0 and 1 for convenience and easy interpretation. The PI for the various stages in CRDP projects was obtained by using the formulae above modified from Kamnap 2003 and Gani and Adeoti 2011. The participation index result (Table 3) in this study reveals that participation is high in all the key areas of study but one. Participation in stakeholders committee interaction had the least (PI= 0.1). This may be due to the fact that each project have representatives at the stakeholders committee level and little or no conflict are reported to the committee as most of the

emanating conflicts are resolved by the project leaders. The sharing of benefits among the project beneficiaries is high (PI=0.6) as most of the participant get their shares as at when due.

Table 3: Participation index

<i>Interaction</i>	<i>N</i>	<i>%</i>	<i>Value</i>
Benefit sharing	201	67	0.6
Stakeholders	87	23	0.1
Project engagement	105	35	0.15
Level of interaction	105	35	0.15

DISCUSSION

It is important to note that most of the projects are managed directly by the initiating government (CWP, Care Group) and salary and stipend payments are done on monthly basis. This may account for high participation index in benefit sharing among the stakeholders. This result contradicts study done by Alhassan (2010) who reported that local people were mostly not involved in sharing of benefits. The nature of the participation, the type of project and people concerned may be some of the reasons for this disparity. This finding also contradicts recent literature on natural resources decentralization and devolution, which argues that local elites at the community level are likely to capture benefits intended for poorer groups (Shackleton et al. 2002; Platteau and Gaspart 2003; Kumar 2002 cited by Alhassan 2010).

The respondents' interaction level among stakeholders was ranked on a Likert scale of "1=Low" to "5=Very High". Majority, 67% of the respondents believed their level of interaction among stakeholders to be generally high (Table 2). The study shows that the respondents on the same project have cordial relationships among themselves. This interaction could be referred to as horizontal interaction because it takes place among members of a particular CRDP project. Members of each project leave together in the community and they are familiar with one another. The cordial relationships among members span not only at work but also at the home front.

The respondents, 35% believe that the nature of engagement among the participants of the CRDP projects is very high (Table 3). Though the indication about the nature of engagement between participants in the projects was gener-

ally high but it is logical to believe that more potential exists for increasing value-added engagement outcomes across the CRDP projects. Stakeholder engagement often has benefits and/or risks for the stakeholders themselves, and that the social, economic, cultural, and political environment affects stakeholder participation in project implementation (Harvey 2009). Participation is highly influenced by the local socio-economic context of the projects area. The economic base (financial support) highly influences participation.

A number of projects have been initiated to find solution to the perennial problem of water for agricultural purposes in South Africa and many are still in progress. A region like Gauteng receives portable water supply from Swaziland which is another country close to South Africa. Government, through the establishment of backyard gardens provided Jojo tanks, which is a 500-1000 litre tank, for rain water harvesting and introduced irrigation technology at the various agricultural projects in Muyexe to solve the problem of water shortages. This effort is fruitful only few weeks after the raining season in this area. The raining season is between October and January which is about four months. The dry season that lasts for about 8 months could be insufficient for any farming activity. The drinking water is usually taken from the boreholes and the rain water but the water harvested through the tank are also converted for drinking by the people in the community. The study observes that some of the villagers knew the method of water purification through training and workshop organised by the available clinics.

The level of interaction among the stakeholders within each project participants (vertical) was seen to be very good but across the CRDP projects (horizontal) in the community, the story is not the same. This is premised on the typology of participation among the stakeholder. The findings of De Campos-Guimarães (2009), shows that for a rural development project such as the CRDP projects in Muyexe to be successful, there must be a high level of stakeholders interactions from one project to the other and among the governmental stakeholders, NGO and local community leaders. That is, there should be thorough interactive participation among stakeholders. The only avenue for meaningful interaction is at the Council of Stakeholder meetings taking place only once every month. The meetings are

attended only by representatives of various CRDP projects and most of the meetings are not well attended by members except there reporting of critical issues. Conversely, council of stakeholders' committee interaction had no significant influence on project participation. This may be due to the fact that the council of stakeholder committee only deal with conflicts and acts as intermediary between stakeholders.

Household food security has been widely acknowledged as a major factor in determining the quality of life (Hoddinott and Yohannes 2002). It requires adequate home production of food and/or adequate economic and physical access to food. Economic access comes from an adequate purchasing power, while physical access refers to the proximity of markets or other distribution channels through which food may be acquired (Maliwichi et al. 2012).

The households reported an increased food production change, 45.5% and increased food consumption change, 45.9%. This may be as a result of regular sharing of benefits from the CRDP projects. This may improve the quality of life of the participants but if appropriate intervention is applied, sustainability may pose serious issue among households in the long run. Household food security can be both subjective (as households members perceive it) and objective. Subjectivity is important as coping strategies are designed on the basis of perceived threats of food deficit rather than those revealed by objective indicators (Obayelu 2012). Local participations have been argued not to always improve decision making on sustainability issues (Brandt and Svendsen 2013).

CONCLUSION

Many of the pre-CRDP intervention appear to have either collapsed completely, are struggling to survive or remain fairly dependent on government financing for continued functioning due to some of the gaps such as failure to identify key stakeholders at the initial stage of project and undefined role of stakeholders among others. A better comprehension of the role of a stakeholder as a driver of individual multi-level projects has been shown to play a pivotal role in its success. Culture and tribal authority powers have been found by the study to influence the way in which stakeholders undertake participatory activities. Eventhough the

group dynamic is but one factor that can have a bearing on group analysis, and much more research needs to be done to address these. In the study, the presence of financial resource support systems in the projects promoted initial participation. This study reveals the importance of managing power relations between key stakeholders, improving institutional capacity and involving local stakeholders in the designing and implementation stages of the projects.

RECOMMENDATIONS

Lack of capacity and interest remain major challenges to local institutional intervention. The trend in government and NGO's initiated projects is believed to be anchored on financial resource support system. This method has been found to be detrimental to such projects in the long run. Methods of attracting individuals with the focus on ownership of such project should be encouraged. The integration of community based enterprises into commercially oriented interventions should address structural barriers in addition to the provision of project financing. The policy-makers should involve the stakeholders in the process as early as possible to give equal attention to perspectives in the process of location selection, permitting, and policy-making. This process will allow for equal participation of different stakeholders and actors including the youth. Government and donor agencies should entrench progressive sustainability programme in the implementation of their projects.

FOR FUTURE STUDIES

Eventhough the group dynamic is but one factor that can have a bearing on group analysis, and much research needs to be done to address the presence of financial resource support systems in the projects' promoted initial participation.

LIMITATIONS OF THE STUDY

The constraint of funds and other factors did not allow the study to be conducted in the other eight pilot sites, which has made a comparative study of the whole provinces very difficult. However, the findings from the study are useful indicators of the state of stakeholder participation in the government initiated projects.

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