The role of popular participation and community work ethic in rural development: the case of Nandi District, Kenya

PHILIP K. RONO[1] AND ABDILLAHI A. ABOUD[2]

ABSTRACT

This paper examines the performance of rural community development projects in relation to the work ethic, gender and the level of participation in the process of rural development among the Nandi people of western Kenya. Data for the study were obtained from a survey of 25 randomly-selected community development projects and a sample of 305 respondents involved in these projects. Rural development projects were found to achieve on average 53 per cent of their objectives and 56 per cent of their operational effectiveness. Overall, rural Nandi people demonstrated on a 4-range Likert Scale an average measure (2.86) in their community work ethic and an average measure (2.38) in their actual involvement and participation in rural development projects. Policymakers, development planners and implementers should ensure that people in this community are made aware that their level of work ethic, involvement and participation is responsible for the poor performance of their community development projects. If the Nandi rural economy is to be revived, agents of change ought to guide the rural population towards involvement and full participation in projects which are meant to improve their welfare.

KEYWORDS

community participation, Kenya, productivity, rural development, work ethic

[1] Department of Sociology, Moi University, Kenya

[2] Department of Natural Resources, Egerton University, Kenya

Introduction

The Kenyan government's efforts to improve rural development in all parts of the country have been significant both in its level of commitment and its participation in the development process ever since Independence (Kenya 1989b, 1996). Considerable amounts of finance, manpower and material resources have been committed to rural development projects but there has been no corresponding improvement in the performance of community projects that are beneficial to individual households such as health centres, cattle dips, water supplies and women and youth groups in many districts, among which is Nandi District (Kenya 1989a, 1994a). Given a rapid population growth rate of 3.86 per cent in Nandi District, coupled with the low performance there of most rural community development projects, the standards of living in the district are on the decline, as is reflected by the fall in disposable income per capita (Kenya 1989a:42–46, 1994a:50, 66–67, 1996:4–5,10). Little research work has, however, been done to explain or address the factors responsible for this trend.

Though economic reasons, internal policies and structural rigidities may partly account for the poor performance of local projects and hence of rural development, other factors have been overlooked. Foremost among these is the level of community involvement to be seen in the level of the work ethic and participation of the rural people. These factors have been noted as playing a great role in national development and they should be the first to be examined when development does not take place (Misra 1985:91, Nyoni 1987, Thomas 1985, Tisdell 1988, Uphoff 1986, Weber 1977). The study investigates the role of the community work ethic and participation on rural development performance in Kilibwoni and Kapsabet divisions of Nandi District.

The level of rural poverty and the work ethic

The problem and extent of poverty (which is a consequence of stagnating and declining development) in sub Saharan Africa has been growing. It is estimated that in 1992, 42 per cent of the approximately 525 million people in sub Saharan Africa were living below the poverty line of US $370 per capita. This number was expected to rise to about

304 million or 50 per cent of the region's population by the year 2000 (Baker 1997, Breth 1997, World Bank 1995a:22–23, 1995b:18–25, 1997). The level of absolute poverty in rural areas of Kenya was 46.4 per cent and 29.3 per cent in urban areas between 1992 and 1994 (FAO 1986, Kenya 1996:151, World Bank 1995a:22–23, 1995b:18–25). It is estimated that the overall level of absolute poverty in the country now stands at 52 per cent compared to 47 per cent in 1999. Today, poverty manifests itself in the form of hunger, illiteracy and a lack of access to basic education, drinking water, minimum health facilities and shelter. Finding creative solutions to cope with poverty is one of the greatest challenges facing the continent at present.

However, despite two decades of tireless effort and the adoption of several approaches to raise the development and growth of developing countries by integrating the rural population, who are largely peasants, into mainstream development (through community involvement and participation in development projects), development projects and the conditions of living of the rural poor are still deteriorating. This has led to a number of questions: Why are development efforts not bearing fruit among the rural poor? Are these projects' performance impeded by the people's work ethic or their lack of participation? How does community participation impact on rural development performance?

Rural people's participation in community development

Lisk (1985:16), defines popular participation as "the active involvement of a broad mass of people in the choice, execution and evaluation of programmes designed to bring about a significant upward movement in their levels of living". It is a process in which people freely participate in "development ... and in taking an active part in the decisions governing development" (Baetz 1984:2).

In construction of community projects, mutual self-help plays a big role. It reduces building costs for individual households, as construction material can be bought in bulk and skills can be pooled (Rakodi 1983; UNCHS1986:47–53). An outstanding example of community participation in Kenya is the Dandora housing project in Nairobi which the Nairobi City Council supported by encouraging people to form building groups.

The process of group formation began in December 1975 when the first 1000 plots were handed over. In this project, plot charges ended up being higher than originally estimated at the design stage and, in addition, people had to pay for water and temporary shelter or rent elsewhere. The minimum housing expenditures were therefore well over half the minimum wage, without including construction costs and living expenses.

In spite of this, a study of investment in building in Phase I (up to 1983) showed that, on average, residents had mobilized six times more construction finance than the official loan provided, 48 per cent coming from loans (mostly from relatives) and 7 per cent from gifts. Most people supervised the construction on their own sites on an individual basis, using some hired and some self-help labour (62 per cent) or hired a skilled craftsman to supervise the construction for them (21 per cent). The remaining 17 per cent worked in the building groups, which used more self-help labour, especially for the unskilled tasks. These were people with no additional source of finance. The fact that they were able to build at all may be attributed to the building group support services provided by housing development department's Community Development Division (UNCHS 1985a).

The rural work ethic and development

The prevailing work ethic is another important and hitherto unstudied factor in development processes. This study contributes to determining the level and role of community work ethic on the overall rural development performance in Kenya. The Ministry of Planning reports, for example, that the per capita income of Nandi District is about 140 Kenya pounds per annum (Kenya 1989a:54). According to this survey, rural poverty is rampant in the district, manifesting itself in high mortality rates, poor housing, poor health and little or no access to clean water, an increase in the number of people living in abject poverty and low and declining levels of disposable income, yet the available natural resource base is not being optimally utilized (CBS 1987–1992, Kenya 1994a:77). It is not known whether the Nandi people's work ethic encourages a commitment to work and community participation because there is no

available data on this. As a result the district planning team has access only to insufficient and unreliable data on nearly all aspects of development in the district, including available skills (Kenya 1989a:54, 1994a:69–75).

People with a very strong work ethic, that is, in a well-organized society whose culture, beliefs, values, norms and attitudes are work-oriented and who are themselves hard working, are likely to experience more development in nearly all spheres than those whose work ethic is weak. Studies that have been done show that work ethic and development have a direct and positive relationship.

Max Weber, for instance, showed that Protestant religious communities in Europe were more developed and their people were more hard working than Catholic communities because of their strong work ethic (Bates et al. 1975:189, Weber 1958, 1977). This attitude, Weber says, is derived from the Protestant religion which held that human beings are instruments of God on earth and are required to work in a calling for the glory of God. Weber concluded that their work ethic enhanced their development without the believers knowing that their religion was producing tremendous economic changes in society. Where the attitudes and values encourage work and accumulation of wealth, high performance is to be expected and vice versa.

A rural work ethic and participation are crucial factors as far as community development is concerned. Cavalevu (1964:65–68) notes that when a community banana experiment in Fiji was not supported by the local villagers, it failed. The people did not give it their manual labour and planting material. A community agency working with groups remarked:

> We saw that purely technical "solutions" were useless. People's attitudes and feelings must always be taken into account. A solution must be practicable and desirable from the people's point of view (Batten 1967:166).

Poverty can ultimately be eradicated only if the attitudes of the people towards that poverty and other development problems are positively stimulated and they appreciate that solutions can only be generated by the people themselves (Aziz 1987:145).

The local community, as a group, can participate in a number of stages:

> In all cases seen, where real progress was being accomplished in local community development, the first step in that development had been sustained discussion by the community of its basic needs and most urgent problems. Secondly, they had, as a group decided to accept the responsibility of pooling their intelligence, manpower, and local resources to attack one specific problem, the solution of which would meet some felt need of a large majority or all the families in the community. Third, they organised to solve the problem and, in every case studied, learned that they needed some specialised assistance and, in practically all cases, some material or financial assistance outside the community. Fourth, they developed a degree of group responsibility, pride, and zest which led them to attack other community problems (Batten 1967:48–49).

Gordon (1992) further adds that it is the local population's education, skills, and overall commitment to work that determines how much can be produced and how. The *Ujamaa* programme of Tanzania is a good example. Misra (1985:91) found that the structure and operations of two Iringa villages, Lulanzi and Magulilwa, display significant variations in terms of degree of involvement of the members as well as their degree of affluence and scale of operations between socialist (*Ujamaa*) large-scale farmers and the European large-scale capitalist farmers. The performance of the European farmers far exceeded that of their Tanzanian counterparts. Many studies (such as Boesen et al. 1986, Hyden 1969, 1982:220–231, Kahama et al. 1986:40–176) show that these variations are attributed to the commitment of their members to work and the quality of their integrity as well as the style of village leadership. And this is what let down *Ujamaa*.

In most sub Saharan countries (Beets 1990), a few of these qualities are present and emerging at a relatively slow pace in comparison with changes in the rate of population expansion and in relation to overall social and economic global changes. As a result both material resources and the ability to change tend to be subject to strain from the population

expansion. Such strain is not necessarily the result of the depletion of available resources. The difference between the two still remains a source of confusion in determining Africa's resource potential. The disorganization of both the material and methods of resource exploitation and the inhibition of the such exploitation by a lack of social and econonic change have tended to hamper development (Franzel and Van Houten 1992).

Measures, materials and methods

Data sources and sampling procedures

The data used in this study were obtained through a sociological survey conducted between December 1996 and May 1997 in the Kilibwoni and Kapsabet divisions of Nandi District. Field research involved interviewing participants and members of community projects involved using a structured questionnaire. An exploratory survey was conducted to determine the research variables and the possible locations where the research could be carried out in Kilibwoni and Kapsabet Divisions of Nandi District. Since all possible locations had projects that were established on community basis, multi-stage random sampling was used to pick eight locations required as research focus areas. This was immediately followed by identifying and listing the names of all community projects whose nature demanded the local people's participation (either physically or materially) in the locations identified.

By focusing only on those project that solicited community participation and were established with a view of improving the local people's welfare regardless of their project type a shortlist in all eight areas was drawn up. The involvement and participation of local people was measured by their role in the projects. A simple random sampling technique was then used to determine 25 sample projects for study out of a total of 310 which met the criteria mentioned above, due to constraints of time and personnel. The sampled projects now appear listed by types (see Table V) for the purposes of simplifying and bringing out clearly the general nature of projects studied.

The sampling frame was based on a set of 25 lists, with a total of 7914 possible respondents in the two divisions. From the lists made 12

respondents who were members of the respective projects were randomly picked for the study, with chairperson or leader of the project being purposefully picked to act as key informant. The data set comprised a collection of information on projects, the current level of participation, the work ethic of the respondent and the respondent's labour input and the output, among other relevant issues including respondents background.

Key variables and measures

Rural development. Two indicator items were used to measure this variable by being computed into an index. These are:

- the percentage achievement of the project's objectives and
- the percentage project operational effectiveness (determined as the duration of the objectives realization, in relation to the duration of project operation).

These items were derived from the leaders' declaration of the projects' number of planned objectives; the number of achieved objectives; the duration of the objective realization and of the project operation.

Community work ethic. This key variable refers to the societal norms, values and beliefs that encourage conformity to the need for dedication, commitment and sacrifice of one's time (including leisure time) and energy to work with the aim of achieving maximum productivity compatible with the technology applied (Bates et al. 1989). The work ethic variable was measured by 12 indicator items, which were computed into an index that can be found in Table VI below. Each item was awarded 4 points if the response was "always", 3 points for "almost always", 2 points for "sometimes", 1 point for "hardly ever" and 0 for "never". The highest possible score for the respondent's work ethic index was thus 48 points and the lowest 0 points, as calculated from the 12 indicator items.

Data processing and analysis

A computer-based programme, Questionnaire Programming Language (QPL) was used for data entry and the Statistical Package for Social Sciences (SPSS) programme was used for data processing and analysis.

Data processing entailed five basic operations. Firstly, the primary variables in the study hypotheses and their indicator items, where applicable, were identified for further processing. Secondly, frequency distribution analyses were run for the variables identified and indicator items for cleaning purposes. Appropriate scoring and the coding of variables and indicator item categories was done to provide deserving weighting, commensurate with the postulated variable relationships. Fourthly, the suitability and reliability of the variables' indicator items for the construction of respective variable indices was tested, so as to avoid the effects of multi-collinearity. Finally, variable indices were computed for the identified suitable indicator items for use in appropriate analyses.

The two basic data analysis procedures used were descriptive and analytical. A descriptive procedure, in form of frequency distribution analysis, was applied to describe the study's primary variables and the associated indicator items, mainly as they related to the study objectives and hypotheses. Analytical procedures were also used to determine and describe variable relationships.

Results and discussion

Conception and implementation of community projects

To understand the background of study projects, key informants, namely the chairpersons and leaders, as well as respondents, were asked to state the dates when the project was conceived, when they started to operate, when all or some of the project objectives were realized and when the first person enrolled as a member of the project. Responses to these questions are tabulated in Table I.

According to the results in Table I, primary schools are older in terms of conception than the other types of projects, except for Kabaa cattle dip which is 40 years old since the idea was conceived. The duration of all projects since conception ranges between 1.3 years and 40 years. On average, these projects the length of time of these projects respectively is as follows:

- 11.5 years since conception,
- 9.1 years since they started to operate,

Table I: Years since the project was conceived (A), started to operate (B), objectives were realized (C) and since the first person was enrolled as a member (D)

Name of project	Respondents (no)	years since: A	B	C	D
Emdin Pri. School	13		0.4		1.4
Kamungei CPK Church	13		1.5		2.5
Kipkeibon Pri. School	12		26.4		26.4
Tuloi Leketio Women's Group	13		14.4		14.4
Chepkumia Chief's Office	13		1.8		2.4
Burende Women Group	13		7.3		7.3
Kipsugur Water Project	13		1.3		4.0
Sekemiat Youth Group	13		0.5		1.5
Chepsigot Youth Group	11		9.3		9.3
Kapkerot AIC Church	11		7.6		7.6
Kabaa Cattle Dip	11		36.0		36.0
Kilibwoni Youth Group	13		0.4		3.0
Kaptoroi Cattle Dip	13		7.8		8.4
Musanya Cattle Dip	12		7.3		11.0
Tangaton Women's Group	12		16.4		14.3
Lessos AIC Church	9		2.7		3.3
Chesuwe Pri. School	10		23.4		23.4
Chebil Youth Group	12		1.1		0.9
Full Gospel Church	11		11.4		9.4
Kombe Pri. School	13		12.3		12.3
Kalyet Youth Group	13		1.4		1.6
Ollessos CPK Church	13		6.5		6.6
Testai Builders Youth Group	10		5.4		5.4
Tiryo Cattle Dip	13		0.0		18.0
Lessos Mungaret Group	13		1.1		3.0

Number of projects	% achieved objectives	% achieved operational effectiveness
25	52.96	55.63

* - Project objectives have not yet been realized

- 7.1 years since some or all objectives were realized and
- 9.9 years since the first person enrolled as a member. This is a long time for the community to have build into its social structure the capacity to plan and execute community projects.

Project objectives and project effectiveness achieved

The chairpersons and leaders were asked to state the project objectives and the number of the objectives that had been achieved at the time of the study. The percentage of objectives achieved was then calculated. The results obtained and presented in Table I indicate that percentage of objectives achieved ranges from 0 to 95 per cent with an average of 53 per cent of achieved project objectives.

Operational effectiveness is taken to mean current production level as a percentage of the planned production capacity of the project. This measure is computed by multiplying current production as a proportion of planned production level by a hundred. Projects which had achieved their projected operational effectiveness were performing better than those that had not. The operational effectiveness of all the 24 projects was found to be 57 per cent on average, but when all 25 projects were taken into account, the average effectiveness comes down to 56 per cent.

People's actual involvement and participation in projects

Individual respondents were asked the degree of their participation in ten stages of the project in which they were member by choosing one of the replies: "very much", "much", "moderate", "little" or "never". The stages and responses are shown in Table II. This table shows only the percentage distribution of respondents according to their reported actual levels of involvement and participation. Although it appears that their involvement and participation was none to moderate, slightly more than half reported they had contributed "much" to "very much" to their projects in the following situations:

- involved in and/or participated during project conception: 54%
- involved in and/or participated in determining the project type: 57%
- involved in and/or participated in planning/designing: 56%

Table II: Percentage distribution of respondents according to actual level of involvement and participation in the project

	Very much	Moderate	None
In the conception?	38.4	14.8	24.3
In determining the type?	37.4	15.1	20.3
In planning (designing)?	34.8	15.1	17.4
In selling the idea to other members of the community?	32.8	21.0	14.8
In securing logistics and materials?	26.9	23.6	13.8
In the actual implementation (construction)?	30.5	21.6	10.8
In operating (running, taking part in)?	34.4	21.3	7.5
In the maintenance (repairing)?	25.2	22.3	12.5
In the evaluation and appraisal?	26.2	19.0	13.1
In the modification?	25.9	20.3	15.7
AVERAGE PER CENT	31.25	19.41	15.02

- involved in or participated in selling the idea to other members: 56%
- operating or running the project: 51%

The average percentage of respondents who reported that their involvement and participation was "much" to "very much" in all the phases of the community projects in which they were expected to participate was only 50.

These results show that low or average project productivity in Nandi community in the areas where this study was conducted are due to low-to-average involvement and participation in project conception, implementation and operation. Policymakers may need to ensure that people in this community are not only involved in the development process but they are encouraged to alter their current work ethic which inhibits their development. Community development agents need to channel their proposals through project leaders; the lower administrative organs such as the divisional, locational and sub-locational development

committees, who often interact with the local people. The local communities need to know that their current level of project productivity is only half of their expectations because of the prevailing work ethic and participation level and corrective measures have to be designed and adopted for improved production and people's welfare.

Actual involvement and participation index

The involvement and participation index of respondents was computed by assigning a value to the respondent's answers to the ten questions presented to them concerning their level of involvement and their participation in all the stages of the projects. Respondent stating they had contributed "very much" were awarded 4 points, "much" were awarded 3 points and the remaining responses were awarded points in a descending order up to zero. The sum of the points a respondent scored was then divided by 10 in order to obtain an average score to determine the respondent's level of involvement and participation on a 5-point Likert scale, as shown in Table III. The highest average score is 4.00 which represent "very much" involvement. "Much" scores 3.00–3.99, "moderate" scores 2.00–2.99, "a little" scores 1.00–1.99 and "none" scores 0.00–0.99. An analysis of the results of the frequency and

Table III: Frequency and percentage distribution of respondents according to their actual involvement in the project and participation index

Involvement and participation level	Involvement and participation score	Frequency	Per cent	Cumulative per cent
None	0.00–0.99	37	12.1	12.1
Little	1.00–1.99	72	23.6	35.7
Moderate	2.00–2.99	84	27.6	63.3
Much	3.00–3.99	83	26.2	90.5
Very much	4.00	29	9.5	100.0
MEAN SCORE	2.381	TOTAL	305	100.0

percentage distribution of respondents according to their actual project involvement and participation level indicates that 35.3 per cent of the respondents said they had "much" to "very much" involvement in their projects. The proportion of community members who considered their involvement was "moderate" was 27.6 per cent and those who perceived their involvement to have been "none" to "a little" was 47.8 per cent. This latter proportion is relatively large and it varies slightly from findings in Table II in which respondents reported their involvement and participation in project conception, implementation and operation to be 28.49 per cent (for "none" to "a little" categories combined). The mean index score is 2.38, suggesting a slightly more than moderate involvement and participation in development projects by the local people.

Given the results described in Table III, a slightly bigger majority (63.3 per cent) of the respondents have none to average involvement and participation in rural development projects in Kilibwoni and Kapsabet Divisions. The foregoing analysis reveals a community with a weak work ethic and a weak participation level and rate in the rural development process. This explains the low-to-average project performance that prevailed in the district at the time of the study. Policymakers and planners must ensure that people are in the first place sensitized about the impact of their current work ethic and participation in the development process before they expect any rise in their standards of living which appear to be directly linked to the projects' low level of productivity.

Planned and achieved output of the most important commodity

The output of the most important commodity was considered one of the best indicators of the projects' performance. If the projects' production levels match the projected output, they are doing better than those that have not achieved such output levels. Table IV shows that it is only Kipkeibon and Chesuwe primary schools that have achieved either 100 or over 100 per cent of the planned annual output (that is, the number of pupils completing standard eight exceeded the planned number) of the most important commodity, with the Tangaton Women's Group being the only project that has achieved a remarkably high 75.8 per cent of its annual planned output. The remaining projects

Table IV: Percentage distribution of planned and achieved annual output of the most important commodity produced by projects

Name of project	Planned type of commodity	Annual achieved output	Annual output	% output achieved
Emdin Pri. School	Pupils	120	100	83.3
Kamungei CPK Church	n.a.	n.a.	n.a.	n.a.
Kipkeibon Pri. School	Pupils	15	25	166.7
Tuloi Leketio Women's Group	Contributions*	18,900	8,400	44.4
Chepkumia Chief Office	n.a.	n.a.	n.a.	n.a.
Burende Women's Group	n.a.	n.a.	n.a.	n.a.
Kipsugur Water Project	n.a.	n.a.	n.a.	n.a.
Sekemiat Youth Group	n.a.	n.a.	n.a.	n.a.
Chepsigot Youth Group	n.a.	n.a.	n.a.	n.a.
Kapkerot AIC Church	Converts	30	2	6.0
Kabaa Cattle Dip	Cattle	60,000	18,000	30.0
Kilibwoni Youth Group	Maize (kg)	3,600	n.r.	n.a.
Kaptoroi Cattle Dip	n.a.	n.a.	n.a.	n.a.
Musanya Cattle Dip	n.a.	n.a.	n.a.	n.a.
Tangaton Women's Group	Cash	19,000	14,400	75.8
Lessos AIC Church	Converts	30	5	16.7
Chesuwe Pri. School	Pupils	20	20	100.0
Chebil Youth Group	Honey (kg)	1,200	120	10.0
Full Gospel Church	Converts	30	18	60.0
Kombe Pri. School	n.a.	n.a.	n.a.	n.a.
Kalyet Youth Group	Cash (p.m.)	2000	600	30.0
Ollessos CPK Church	n.a.	n.a.	n.a.	n.a.
Testai Builders Youth Group	Projects	100	40	40.0
Tiryo Cattle Dip	Cash	28,800	0.0	0.0
Lessos Mungaret Group	n.a.	n.a.	n.a.	n.a.
	Mean per cent			55.2

KEY: N.A.: NOT APPLICABLE N.R.: NOT YET REALIZED

* MONTHLY ROTATING CONTRIBUTIONS FROM MEMBERS TO A MEMBER

have achieved 60 per cent or less of their planned annual output of their most important commodity. Tiryo Cattle Dip has achieved zero per cent of its planned annual commodity output. This project was expected to have offered dipping services to a total of about 28,800 head of cattle per year but did not achieve this because it was closed down due to poor management and maintenance. Respondents said,

> our project did not perform poorly as such, but the managing committee misused the funds generated from this project and did not carry out repairs when they were due. They simply abandoned the management of our cattle dip in preference of other commitments. The rest of us are poor, uneducated, with very low monthly income and so we could not and have not managed to date to revive it.

Respondents to the Sekemiat (Honey) Youth Group said, "we frequently meet but we have a major problem of co-ordination. Our chairman is a minibus (*matatu*) conductor and so does not have time to attend meetings during the day."

Respondents in the Burende Women Group said, "our problem is that our members do not attend meetings regularly. They claim to be busy in domestic work and other community activities. Another factor that is letting us down is the disagreements and divisions among ourselves." About six women said, "Frankly, there are contentions over leadership positions here and this has really hindered our progress." On average, all the 12 productive projects shown in Table IV at the time of interview had achieved 55.2 per cent of their projected annual output. Community development projects in Nandi District are likely to be producing at half their planned productivity levels. This is an indication of a poor work ethic, or it is a combination of many factors which include, for example work values, norms and a participation level that contributes to this type of performance.

The participation rate in community development projects

Nearly all projects, whatever their aim, expected a 100 per cent participation from its beneficiaries. However, this goal appears to have

Table V Respondents distribution by actual involvement and participation rate in rural development projects

Name of project	Expected no. of participants	Actual no. of participants	Participation rate
Emdin Pri. School	144	100	69.4
Kipkeibon Pri. School	90	79	87.8
Kombe Pri. School	90	120	133.3
Chesuwe Pri. School	30	35	116.7
Tuloi Leketio Women Group	11	11	100.0
Burende Women Group	15	5	33.3
Tangaton Women Group	10	30	300.0
Kilibwoni Youth Group	20	16	80.0
Sekemiat Youth Group	30	20	66.7
Testai Builders Youth Group	15	35	233.3
Chepsigot Youth Group	20	15	75.0
Kalyet Youth Group	10	25	250.0
Chebil Youth Group	30	24	80.0
Ollessos CPK Church	200	70	35.0
Full Gospel Church	12	12	100.0
Kapkerot AIC Church	350	40	11.4
Lessos AIC Church	20	8	40.0
Kamungei CPK Church	70	40	57.1
Chepkumia Chief's Office	6000	2000	33.3
Lessos Mungaret Self-Help	29	19	65.5
Kipsugur Water Project	25	15	60.0
Kabaa Cattle Dip	120	108	90.0
Kaptoroi Cattle Dip	60	40	66.7
Musanya Cattle Dip	100	70	70.0
Tiryo Cattle Dip	110	70	63.6
AVERAGE PARTICIPATION	229	118	74.8

eluded most of them. Table V shows that only eight out of the 25 projects achieved this goal. Among these are projects with participation rates of over 100 per cent, such as the Tangaton Women's Group, Chesuwe

Primary, Kombe Primary, Kalyet Youth and Testai Builders Youth Groups. Care should be taken however, not to exaggerate these participation rates, since we are dealing with a smaller number of participants per project and therefore an additional member represents a larger percentage than it would be if we were dealing with a large section of the community.

Tangaton Women's Group expected 10 individuals to participate but only 20 additional members boosted their participation rate to 300 per cent. In contrast, Chepkumia Chief's Office expected nearly all 6000 residents to contribute to the construction of the office but only 2000 had participated by the time of interview. The project thus achieved a 33.3 per cent participation rate, despite the large number of participants. In another project, the Kibochi water project, 300 people were expected to participate but the project never took off at all, let alone achieving the expected number of participating members. The Tiryo Cattle Dip project, which expected 110 people to participate, started with a participation rate of 63.6 per cent but the project apparently stalled later.

An inspection of Table V shows that the actual average participation rate is 39.46 per cent when the average actual participants (118) is computed as a percentage of the average expected participants (229). Comparatively, the mean participation rate of all the projects (namely 74.8 per cent) is more than two and half of the proper average or actual participation rate. This tells us that, although the ratio of new members who join current ongoing rural development projects in Nandi community appears to be high, the actual participation ratio of all people in the development activities is in fact only a third of the population residing in the two divisions.

However, the participation rate seems to rise in projects such as schools, women and youth groups that directly benefit community members. Projects that benefit the community as a collectivity, that is, indirectly, recorded low participation rates. Women record the highest participation rate of 127.7 per cent compared with all the project categories put together. This category was followed by the youth self-help groups with 108 per cent, community primary schools, cattle dips and water projects. The remaining community projects recorded a participation level lower than 50 per cent, reflecting how the community

ranked its felt needs. This finding supports the social exchange theory which states that people will participate in an activity to the degree that they value the reward of that activity. It is expected that such rates of participation will, to a large extent, affect project performance in the district. This could also imply a poor work ethic and that the low involvement of people in the development process impinges on the community's capacity to realize its essential basic needs and the improvement of its standard of living.

The community work ethic and participation in development projects

To measure their work ethic, respondents were asked 12 comprehensive questions probing their commitment to work. These are listed in Table VI. These are selected to address the relevant work ethic issues among the rural people of Nandi and are indicators of their expectations of a hardworking member of the community. Given the nature of their working environment and work, most people in this community rise up as early as 5.00 a.m. to work. Men, for example, have to wake early during the ploughing season to drive the oxen.

In soliciting information, project participants were given five response alternatives: "always", "almost always", "sometimes", "hardly" and "never" for each question. Respondents who answered that they "always" did all the 12 activities which are directly related to work are considered to have a good work ethic, compared with those who answered that they "hardly" or "never" do. Table VI shows that the work ethic of 76 per cent of all respondents falls between "always" and "sometimes". Judging from these findings, we can generally conclude that people in Kilibwoni and Kapsabet Divisions have a low-to-moderate work ethic.

The level of the community work ethic

People's work ethic represents their degree of commitment to work and is reflected by the level of individual output or the project's level of production where man-labour hours is a major component of the production input. Responses to the questions in Table VI were constituted into an index and respondents were awarded 4 points if

Table VI: Percentage distribution of respondents according to their own work ethic

Would you:	Almost always	Always	Sometimes	Hardly ever	Never
Work on Sundays and public holidays?	9.1	4.9	17.1	35.3	33.5
Work in rain and bad weather?	13.6	7.4	22.7	26.5	29.6
Risk all your assets by investing them in your work?	0.1	16.6	40.4	14.1	8.8
Help your neighbours' work even with no payment?	14.9	17.7	42.9	14.3	10.2
Follow the assistance given by officials, even under difficulties?	19.9	13.4	41.3	20.2	5.3
Adopt all innovations suggested by other people?	9.2	8.3	67.7	8.9	5.8
Insist on completing work you have started even under difficulties?	41.1	35.6	19.6	2.5	1.2
Undertake any type of work that comes your way?	22.5	22.2	40.7	8.3	6.2
Encourage your children and relatives to take any jobs that come their way?	36.9	24.3	31.7	3.1	4.0
Consider working too hard to be harmless to your health?	42.2	22.7	17.7	6.5	10.9
Participate in a project that is not related to your occupation?	26.4	25.8	29.5	8.4	9.9
Accept a job that requires waking up at 5:00 a.m. every day?	38.7	17.7	30.8	9.1	3.7
AVERAGE PER CENT	24.55	18.05	33.51	13.1	10.76

they said they "always" do one of the 12 activities related to work and 3, 2, 1 and 0 for "almost always", "sometimes", "hardly" and "never"

respectively. The highest possible score is 48 and the lowest is 0 for the answers to question presented in Table VI. To determine the level of an individual's work ethic and therefore test hypothesis one, the total score is divided by 12, the number of questions that were put to the respondent. The resulting average score is the individual's work ethic index. These scores range between 0 to 4 and are categorized into five work ethic levels corresponding to the five response alternatives: 0.00–0.99, 1.00–1.99, 2.00–2.99, 3.00–3.99 and 4.00, as shown in Table VII, which presents the frequency and percentage distribution of respondents, according to their level of work ethic index.

The table shows that there was no respondent whose work ethic index reached 4.00 and only 12.4 per cent of the respondents attained between 3.00–3.99 points which represent a strong work ethic. More than half (65.5 per cent) had an average index of 2.00–2.99, which represents an average work ethic and 22.1 per cent had a weak-to-very-weak work ethic. The distribution of the work ethic score, as described above, implies that the work ethic among the Nandi community is average or less than average. This could be the main explanation of the poor performance of community projects' in the area. This poor project performance is a result of a low labour input, not only to communal projects, but also to a person's own work.

Table VII Frequency and percentage distribution of respondents according to their level of work ethic index

	Work ethic level	Work ethic score/index	Frequency %	Cumulative %
Very strong	4.00	0	0.0	0.0
Strong	3.00–3.99	33	10.8	10.8
Average	2.00–2.99	200	65.6	76.4
Weak	1.00–1.99	67	22.0	98.4
Very weak	0.00–0.99	5	1.6	100.0
	TOTAL	305	100.0	
MEAN SCORE	2.86			

Recommendations

Policy implications

Capacity and institution building in rural development is economically and socially desirable and imperative for the eventual industrialization of Kenya. It is becoming clear, however, with the frequent aid cuts and suspension of grants, that for any meaningful development to occur, Kenyans themselves and particularly the rural people, must exert more effort towards achieving higher production levels through developing skills and mobilizing and utilizing rural resources to set up a modern, appropriate, infrastructural base.

Training and capacity building programmes are needed in which facilitators who are identified and trained by the Department of Social Services can interact with and exchange ideas with local communities and, at the same time, instil new ideas. The training should broad and touch on all areas relating to development, not narrowly on project identification and implementation. Once rural communities have been sensitized and encouraged to take the initiative in this direction, external support could be sought for more capacity building. The low-to-average project productivity in rural Nandi community is due to the people's work ethic which is only average and their low-to-average involvement and participation in project conception, implementation and operation. Policymakers and planners need to ensure that people in this community are not only involved in the development process, but are also encouraged by development committees at divisional and locational level (community-based development agencies) to alter their current work ethic which inhibits their development.

Some rural development projects in Nandi District have stalled because of poor co-ordination, poor management, a diminishing teamwork spirit and a decline in commitment to community projects and activities. If the declining rural economy is to be revived, all officials at all levels must begin by informing the rural population of what is happening and by guiding them towards full participation in projects meant for their own welfare. Such policies may be diffused successful by the managers of development (namely, the district development committee, the division development committee, the location

development committee and the sub-location development committee) and through the *Maendeleo Ya Wanawake* and youth organizations at location and sub-location community level leadership. This should go beyond the rural household to grassroots levels, schools and tertiary institutions of learning. In order to guarantee sustainability of this spirit and motivate the rural people, policymakers and planners now need to devise ways of invoking more participation and ensuring that that participation is sustained and continues to rise.

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