

Impact Assessment of Nomadic Education Extension Programme on Nomadic Pastoralists and Traditional Livestock Production in Kaduna State

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Target audience: Pastoralists, Policy makers, Nomadic educationist, Extension officers, Researchers.

Abstract

A study was conducted to assess the impact of Nomadic Education Commission's Extension Programme (NEEP) on Nomadic Pastoralists and their livestock production system in Kaduna state. Structured questionnaire and personal interview were used to collect data from 84 randomly selected pastoralist's households. Data collected from the study were analyzed using descriptive statistics. The result showed that NEEP had positive impact on the Nomadic Pastoralists and their livestock production system. All the Pastoralists (100%) vaccinated their animals annually, 88% practiced feed supplementation and 100% of the Pastoralist communities formed cooperative societies out of which 68% were registered and had made some achievements in areas of self-help project execution, unity among members, management of Habba'e animals (small ruminants), running of local cattle upgrading programme and enrolment of members in e-learning centers. These achievements improved the Pastoralists' production system, their earnings and marketing skills towards transformation of the traditional system of livestock production to satisfy the nation demand for meat and dairy products. It was concluded that the NEEP had positive impact on the Pastoralists who gained knowledge and were actively involved in livestock related income generating skills through cooperative society formation and management.

Key words: Nomadic Education Extension, Pastoralists, Impact assessment

Description of Problem

The Nigerian nomadic pastoralists are one of the most marginalized and educationally disadvantaged groups in the country. They are least served in terms of social services and infrastructure. These problems coupled

with the increasing degeneration of the ecological conditions in the drier parts of Northern Nigeria and expanding irrigation cultivation along the riverine areas of the country had complicated the problems of pastoralists, resulting in low levels of productivity. Because of the low

level of education among the pastoralists and livestock extension services they have been unable to adequately respond to these changing conditions. The end result is the increasing level of poverty, breakdown of social and family institutions and increasing rate of insecurity among pastoral communities (1). The Federal Republic of Nigeria recognized the need for a special programme to ensure access to quality and basic education for nomadic pastoralists. This realization prompted initiatives by the Nigerian Government to articulate and evolve innovation strategies and a special programme for the widening of access to basic education and its effective delivery to Nomads. Efforts in this direction culminated in the introduction of the National Commission for Nomadic Education (NCNE) in 1989 by Decree 41 of 1989 now cap 243 LFN to implement the programme, whose major goals are to among others, provide the nomads with relevant and functional basic education and improved the survival skills of the nomads by providing them with knowledge and skills that will enable them increase their productivity and level of income and also participate effectively in the nations socio-economic and political affairs (2). The National Commission for Nomadic Education so far concentrated its activities on formal education and recently incorporated awareness creation through its extension programme. Since establishment, no attempt was made to study the impact of the Nomadic Education Extension Programme on pastoralists. Consequently, this study was

designed to assess the impact of Nomadic Education Extension programme on nomadic pastoralists and their livestock production system in Kaduna state.

The objectives of the study is to assess the;

1. Impact of extension on pastoralist development and their productivity (output).
2. Level of acquisition of livestock skills among the pastoralist.
3. Pastoralists' knowledge and level of participation in livestock related income generating skills and marketing.

Materials and Method

The study was carried out among randomly selected pastoralists in 17 pastoralists' communities within 7 Local Government Areas in Kaduna state. The Local Government Areas, are Birnin Gwari, Chikun, Giwa, Kachia, Kagarko, Sabon Gari and Soba. These were covered by nomadic education extension agents. Data were obtained from the pastoralists by means of a structured questionnaire and personal interview, among 84 pastoralists in the study area.

The parameters considered on the background characteristics of the respondents include sex, age, marital status and educational status. Information on the Pastoralists' level of participation in education, livestock related income generating skills, acquisition of livestock production skills, cooperative abilities and partnership with other organizations were also obtained. The data collected

were analyzed using simple descriptive statistics of frequencies and percentages.

Results and Discussion

Biodata of Respondents

The biodata of the pastoralists showed that 75% of them were males and 25% females. This might be attributed to the dominant roles accorded to males by customs, traditions and religious belief in the study area (3). About 62% of the respondents were within the active

working age of 21-40 years, while 25% were within the age of 41 – 50 years. Only 13% of the respondents were above 50 years of age. The greater proportion of the economically active age group is indicative of the potential that exist for adoption of any innovation and/or intervention that could assist the pastoralists develop themselves physically, socially and intellectually to cope with the challenges of the contemporary world.

Table 1: Biodata of respondents

Characteristic	Frequency	Percentage (%)
<i>Sex</i>		
Male:	63	75
Female:	21	25
<i>Total</i>	84	100
<i>Age</i>		
21 – 30	17	20
31 – 40	35	42
41 – 50	21	25
>50	11	13
<i>Total</i>	84	100
<i>Marital status</i>		
Married	69	82
Not married	15	18
<i>Total</i>	84	100
<i>Educational status</i>		
Quranic	35	42
Adult education	42	50
Primary school	5	06
Secondary school	2	02
<i>Total</i>	84	100

Majority of the respondents (82%) were married and only 18% were single. Most of the respondents (50%) had adult literacy education, 42% had Quranic education, only 6% and 2% had First School Leaving Certificates and Senior Secondary School Certificates, respectively. The high percentage of respondents (58%) with adult literacy, primary and secondary school education was due to the involvement of the nomadic education extension agents on creating awareness, enlightenment campaign and subsequent establishment of adult literacy centers and nomadic primary schools for pastoralists. The pastoralists were exposed to the elementary form of modern education resulting in increased level of literacy among the pastoralists improved standard of living conditions and animal management. This observation was in agreement with earlier reports (4).

Impact of Nomadic Education Extension Programme on Pastoralists

The result showed that all the respondents (100%) had nomadic primary schools and functional Parents/Teachers Associations (PTA) in their communities. About 68% of these PTAs were formed through the assistance of the nomadic education extension agents. About 92% of the PTAs were reported to

had initiated and carried-out self-help projects within their respective nomadic primary schools (Table 2). This may be attributed to the realization of the need by the pastoralist to educate their children with a vision of integrating into the national life (5)

The pastoralists did not only recognized the need to educate their children but also educate themselves by enrolling in adult literacy centers located in their communities where they acquired simple numeracy and reading skills. About 96% of the respondents indicated that their communities had adult literacy centers. Majority (50%) of these centers were established in 2002 by the Nomadic Education Commission. About 341 adult learners graduated from these centers, out of which 64% were males and 36% were females. About 100% of the pastoralists' communities were visited by the nomadic education extension agents for livestock and educational extension activities. This resulted in the increased level of awareness and acceptability of innovations and improved livestock production practices among the pastoralists. The impact of the visits to the pastoralists were more on animal health and production (96%), education (84%), and cooperative society activities (80%) (Table 2).

Table 2: Impacts of Nomadic Education Extension Activities on the Pastoralists

Characteristic	Frequency	Percentage (%)
<i>PTA* formation</i>		
Nomadic Education Extension Agent	57	68
Teachers	27	32
<i>Total</i>	84	100
<i>Self-help project initiation</i>		
Yes	77	92
No	07	08
<i>Total</i>	84	100
<i>Adult literacy center in a community</i>		
Yes	81	96
No	03	04
<i>Total</i>	84	100
<i>Frequency of Extension Agent visit to community</i>		
Two visits/Month	16	20
Three visits/Month	34	40
Four visits/Month	84	100
<i>Total</i>		
<i>Areas the community benefitted**</i>		
Animal health and production	81	96
Education	71	84
Cooperatives	67	80
Human health	30	36
Skills acquisition	17	20

*Parent/Teachers Association

**Multiple responses

According to (4), these are the major focal points that need to be improved upon to transform the pastoralists living style and production system, satisfy the ever increasing domestic and international demand for meat and dairy products, and integrate them into the national life to participate effectively in the nation's socio-economic and political affairs (6).

Acquisition of Livestock Production Skills among Pastoralists

Acquisition of livestock production skills among pastoralists is shown in Table 3. All the pastoralists (100%) in the area of study vaccinated their livestock annually against the endemic livestock diseases. About 96% of these vaccinations and livestock treatment were done through the assistance of the nomadic education extension agents. Although 100% of the pastoralist managed their animals on

extensive system during the rainy season, 88% were found to give their animals supplementary feeds (oil seed cakes, concentrates, crop residue, and minerals) during active production (lactation and fattening) and also during the period of feed scarcity in the dry season. About 34% of the pastoralists were trained on

livestock production skills through the nomadic education extension agents, who organized 68% and facilitated 52% of the trainings, respectively. This indicates that the pastoralists had acquired livestock production skills which will assist them in improving their traditional livestock production.

Table 3: Livestock production skills imparted on Pastoralists.

Characteristic	Frequency	Percentage (%)
<i>Carrying-out the vaccination</i>		
Nomadic Education Extension Agent	81	96
Local government Veterinary staff	03	04
<i>Total</i>	84	100
<i>Livestock treatment</i>		
Nomadic Education Extension Agent	81	96
Local government Veterinary staff	03	04
<i>Total</i>	84	100
<i>Livestock supplementary feeding</i>		
Yes	74	88
No	10	12
<i>Total</i>	84	100
<i>Livestock skills training</i>		
Yes	71	84
No	13	16
<i>Total</i>	84	100
<i>Role of Nomadic Education Extension Agent in the training**</i>		
Organizing/Facilitating	57	68
Training	44	52

**Multiple responses

Participation of the Pastoralists in Livestock Related Income Generation Skills and Marketing

About 52% of the pastoralists' communities had formed radio listening groups. Most of the radio listening groups (62%) were formed in 1999 when

the Nomadic Education Commission directed the nomadic education extension agents to form pastoralist radio listening groups. This facilitated indebt understanding of the bi-weekly broadcasted radio programme of the National Commission for Nomadic

Education “*Don makiyaya a ruga*”, which provided the pastoralists with relevant coping skills and knowledge required for dealing with complexities of the contemporary world (7). This sensitization over the electronic media coupled with the extension activities of the nomadic education extension agents equipped the pastoralists with the nature, causes and possible solutions to their

problems. This also assisted the pastoralists to identify appropriate income generation activities through cooperative system (Table 4). About 100% of the pastoralists’ communities in the area of study had formed one or more cooperative societies and 68% of the Cooperative Societies were registered. These pastoralist cooperative societies had recorded some achievements.

Table 4: Level of participation of the Pastoralists in livestock related income generation skills and marketing.

Characteristic	Frequency	Percentage (%)
<i>Radio listening group in community</i>		
Yes	44	52
No	40	48
<i>Total</i>	84	100
<i>Frequency of radio listening group meeting</i>		
Weekly	20	46
Monthly	10	23
None	14	31
<i>Total</i>	44	100
<i>Cooperative society registration</i>		
Yes	74	68
No	10	32
<i>Total</i>	84	100
<i>Achievements of cooperative society**</i>		
Obtained loan from a bank	10	12
Unity among members	74	88
Management of Habbona’e animals	34	40
Self-help project execution	64	76
Running of local cattle upgrading prog.	24	28
Enrolment of members in E-learning center	17	20

**Multiple responses

The highest (88%) of these achievement was creating unity among members that provided an avenue for learning from each other, removing the negative effect

of socio-cultural values and wariness of anything new or anybody out to help, paving way for adoption of new innovations and way of life. This leads to

increased productivity and level of income and effective participation in the nation socio-economic and political affairs. Another achievement recorded was self-help project execution (76%), where members within a cooperative society initiated and carried out projects towards the upliftment of each other and their communities. About 40% of the respondents benefited from the management of Habbanae animals aimed at poverty alleviation at the grass root. Another achievement was participation in local cattle upgrading programme, where 14 registered cooperative societies in Ladduga, Kachia Grazing Reserve, collaborated with Integrated Dairy Farm Vom, Plateau state on grading-up of the local breeds of cattle by crossbreeding with Frisians bulls supplied to the cooperative union (9). Enrolment of members of cooperative societies to e-learning center which accounted 20 and 12% respectively was another achievement recorded through the programme and obtaining loan from banks. This could be an indication that the pastoralists had gained knowledge and were actively involved in livestock related income generating skills through

Impact of Nomadic Education on Partnership with other Organizations

The pastoralist had benefitted tremendously in different areas from these organizations (Table 6). The highest (60%) benefit to the pastoralists was in the area of animal health and production. This involved fodder banking, grading-up of local cattle, vaccinations, provision of

cooperative society formation and management.

Pastoralists working relationship with NGOs and other government agencies

The pastoralist communities were in working relationship with NGOs and other government agencies (Table 5). About 96% of the respondents indicated that their communities were in a working relationship with NGOs and other government agencies, and 96% of the relationship between the communities and the development partners were facilitated by the nomadic education extension agents. The pastoralist communities had the highest (68%) level of relationship with Pastoral resolve (PARE), followed by Local Government areas (44%), National Livestock Project Division (28%), Integrated Dairy Farm (IDF) Vom (14%), International Livestock Research Institute (12%), and Rural Empowerment Initiative in West Africa (8%). Majority (67%) of the organizations were NGOs with the goal of developing the hard-reach people at the grass-root. The pastoralist benefitted tremendously from the NGOs and other government agencies.

veterinary drugs and awareness creation on simple herd health management. Education which involved provision of teachers, school infrastructures, furniture and instructional materials to the

Table 5: Relationship with NGOs and other government agencies

Characteristic	Frequency	Percentage
<i>Working relationship with other development partner</i>		
Yes	81	96
No	03	04
<i>Total</i>	84	100
<i>Facilitation of relationship between community and development partner</i>		
Nomadic Education Extension agent	81	96
Others	03	04
<i>Total</i>	84	100
<i>Organizations in partnership**</i>		
Pastoral Resolve (PARE)	57	68
Local Government Area (LGA)	37	44
National Livestock Project Division (NLPD)	24	28
Integrated Dairy Farm(IDF), Vom	12	14
International Livestock Research Institute(ILRI):	10	12
Rural Empowerment Initiative in West Africa(IDF)	07	08
<i>Areas community benefitted from development partner**</i>		
Animal health and production	50	60
Education	44	52
Watering points and portable water	40	48
Human health	24	28
Provision of an E- learning center	17	20

**Multiple responses

Table 6: Impact of Nomadic Education in partnership with other organizations

Characteristic	Frequency	Percentage
<i>Areas community benefitted from development partner**</i>		
Animal health and production	50	60
Education	44	52
Watering points and portable water	40	48
Human health	24	28
Provision of an E- learning center	17	20

**Multiple responses

Nomadic primary schools and establishment of Early Child – Childhood Development (ECCD) centers had 52% impact on the pastoralists. Provision of watering points and portable water to pastoralists was also a benefit realized from a partnership between the NLPD and LGA. Construction of earth dams, drilling of boreholes and sinking of concrete wells for provision of portable water to animals and man, especially within grazing reserve and cattle routes account for 48% of the benefit. About 28% of the pastoralists benefitted from the constructed community maternal and childcare clinics, training of pastoralist traditional birth attendants (TBAs), peer health educators (PHEs) and community based distributors (CBDs) of reproductive health consumables, immunizations and awareness creation on HIV/AIDS and sexually transmitted infections (STIs) (10). About 20% of the pastoralists benefitted in the provision of an e-learning center (20%) by a development partner REIWA, where they enrolled themselves and children to learn simple basic computing.

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Conclusion and Application

It was concluded that:

1. Nomadic Education Extension programme had a positive impact on the Pastoralists and their livestock production system.
2. Pastoralist had fully accepted the nomadic education programme. They appreciated the value of been educated and the importance of modern livestock management techniques.
3. Pastoralists had acquired livestock production skills and actively participating in livestock related income generation activities through cooperative society formation and management.
4. Nomadic Education Extension programme had contributed tremendously towards the transformation of the traditional system of livestock production to satisfy the domestic and international demand for meat and dairy products.

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