

FINAL TECHNICAL REPORT

R7359

The Delivery of Veterinary Services to the Poor: a framework for analysis.

Executive Summary

The original objective of the project was to analyse the uptake and impact of veterinary services to the poor. However, as the project progressed, it was clear that the contribution and outputs of the project would both meet and exceed its original mandate. Improving the livelihoods of the poor through enhanced animal health is only one avenue to increase the wellbeing of the poor. Indeed, the project offers empirical evidence, methods and methodologies to identify issues and inform actions regarding all aspects of livestock-based livelihoods. In this manner, the new goal of the project is to create a new paradigm of livestock development, which supports the actions and agency of the poor while addressing key constraints. To meet this aim, the project collaborated directly with over 85 institutions varying from multi-lateral donors to community-based and religious organisations involved in the livestock sector on three continents. In each of the countries involved, the project explored issues in livestock-based livelihoods at the national, community and household level. At the national level, stakeholders meetings were held with over 150 agencies and actors involved in livestock development in Kenya, Bolivia and India. Further, across the countries, over 280 communities participated in the project. In total, approximately 4,000 poor households took part in the focus groups, participatory exercises and individual interviews.

As previously mentioned, the project utilised an Action Research framework. In this manner, a critical and analytical process was present throughout the project cycle from inception and start-up to implementation and completion. By utilising the framework, at each stage additional outputs were derived. Hence, the project has five primary outputs and three secondary outputs. The first output of the study was a Livestock Poverty Assessment Methodology, based upon participatory methods, to enable stakeholders to both identify and better understand key livelihood constraints. The ancillary output from this process was an analysis of bias inherent in the application of participatory methods. Second, an assessment of the role of livestock in the livelihoods of the poor was performed. In this manner, the study offered primary evidence as to the function and importance of livestock as a form of human, social and financial capital. The study also explored gender relations and vulnerability factors with regard to livestock management and health. An additional output, which informed the livelihoods analysis, was the creation of a Simplified Livelihood Framework, which offers a more relational and adaptive means of assessing livelihoods. The third output of the study identified and measured key parameters important to the uptake of veterinary services by the poor. The

starting point for the analysis was an exploration of consumer preferences and purchasing behaviour regarding livestock services. By viewing the poor as consumers rather than users of animal healthcare, the study was able to better inform livestock development practice. Indeed, by offering a method for measuring the key parameters, the study enables stakeholders to better identify potential intervention points. The fourth output was recommendations to enhance the poverty impacts of livestock development policy. By performing a holistic overview of livestock-based livelihoods from the perspective of the poor, the study was able to inform existing policies and aid in the creation of a new paradigm of livestock development. Furthermore, by working with a large number of actors and agents involved in livestock development, the study was able to support a collaborative working environment and strengthen linkages between actors and agencies. Equally, the study performed an analysis of the perceptions of poverty and explored community values and expectations. In this manner, the voices of the poor directly informed the policy recommendations. The final output compared different means of disseminating research findings from web-based mechanisms to video to formal means. Thus, all of the outputs of the study by challenging existing norms and perceptions regarding poverty and offering new methods and frameworks to identify the poor and their needs will aid DFID in meeting its poverty reduction goal of halving global poverty by 2015.

Background

Over the course of the last decade, the fight against global poverty has galvanised the world community to action. Development projects and programmes are increasingly justified and funded solely on their potential to aid the poor. Equally, the lessons learned from previous drives to eradicate poverty appear to have been taken on board. It has been recognised that to lower poverty levels, it is first imperative to understand the lives and livelihoods of the poor. Therefore, current approaches generally focus upon the multitude of activities that poor households pursue. Animal husbandry is one such activity. Indeed, it has been estimated that at least one third of the poor rear livestock (LID, 1999). As such, livestock keepers are one of the largest subsets of the global population of the poor.

In recognition of the importance of livestock to the livelihoods of the poor, donors, governments and NGOs have channelled resources to the livestock sector. Early projects tended to be top-down, technology-driven interventions while more recently the focus has been on holistic, participatory and community-based projects and programmes. Nevertheless, the transformation from top-down, technology driven projects to more community based initiatives has not been entirely seamless. Indeed, there is a continuing tension between the two, often conflicting aims of livestock development: technological inputs to increase production vs. community development to reduce poverty. Many practitioners believe the problems of the poor may be considerably aided by technological solutions and that community development approaches cannot be scaled-up. Conversely, for the proponents of community development, many technologies are viewed as lacking relevance to the wider problems of the poor and as such are doomed to failure. Consequently, within the livestock sector, many practitioners still belong either to

the upstream or downstream philosophies and livestock sector research and development activities broadly follow the division.

Nevertheless, the track record for all forms of livestock development is less than enviable. At the micro-level, various successes have been achieved in poverty reduction. However, at the macro-level, the gains are less tangible. Indeed, a review concluded that the majority of animal health projects were not having their intended impact on the poor (LID, 1999). Reasons offered for the poor performance included the lack of a poverty focus and failure to deliver the outputs (ibid). At the time of project start-up, however, there was very little primary information as to who exactly the poor livestock keepers were and what their priority needs were in relation to either animal health or any other factors affecting their livelihoods. Consequently, the overall lack of impact of livestock development may well be attributed to this deficiency of primary data.

Hence, the study was designed to produce outputs to directly address the above needs. First, the project collected primary data on a wide-cross section of poor livestock keepers across three countries. The problems and perceptions of the poor were further explored across pastoralist, subsistence farming, urban and peri-urban production systems. Secondly, the study outputs included both analytical and practical tools to aid practitioners in assessing the problems, capabilities, preferences and values of the poor. In this manner, the project will aid in determining the correct intervention for the communities involved thereby increasing the number of positive livestock development outcomes.

Purpose

The purpose of the project is to analyse the role of livestock as a form and mechanism of poverty alleviation, with a focus on animal health. As such, the goal of the project is to create a new paradigm of livestock development, which supports the capabilities of the poor while addressing key constraints.

Research Activities

Prior to the fieldwork, the study team reviewed the literature on livestock and livelihoods, the delivery of veterinary services and poverty measurement and participation. In addition, the website was developed at this time.

Data Collection Activities

Data collection activities took place in Kenya, Bolivia and India. Core data collection activities included stakeholder meetings, participatory exercises, focus groups and individual semi-structured interviews. The individual interviews were comprised of seven sections: compound mapping, household background, livelihood activities, livestock herd and animal health, consumer preferences regarding human and animal healthcare, poverty conceptual analysis and social network mapping. Thus, the interviews featured both participatory and quantitative elements.

Kenya

In Kenya, 84 communities participated in the project, 360 household-level interviews were performed and approximately 250 individuals participated in the village-level focus groups. A further 157 poor farmers and pastoralists participated in the LPA exercises. Finally, over 30 institutions participated in the stakeholder consultations. Dr Johan Pottier assisted in the preliminary stakeholder meetings at the National, District and community-levels. The following table details the agencies and actors who participated in both individual and group meetings at the national and district level.

During the fieldwork, the LPA methodology was developed and refined. Hence, in each of the communities, the following participatory exercises were performed:

Institution	Participant
Arid Lands Resource Management Project	Mahboub Maalim, National Project Co-ordinator
Arid Lands Resource Management Project	Fatuma Abdikadir, Community Development Co-ordinator
Arid Lands Resource Management Project	Dr S. Wangiki, Veterinary Officer
Shirikisho Youth Group, Kariobangi	Mr Duncan Musi
Shirikisho Youth Group, Kariobangi	Mr George Kimollia
Shirikisho Youth Group, Kariobangi	Mr Emmanuel Ochiambo
Christian Mission Aid	Mr Larry Kitchel, Director
Catholic Church, Kariobangi	Fr Alex Zanotelli
Ministry of Agriculture	Dr B.A. Godana
World Vision, Nairobi	Daniel Kiptueng
Heifer Project International	Dr Alex Kirui
Kenya Agriculture Research institute	Dr H.K. Cheruiyot,
Neighbours Initiative Alliance, Kajiado	Mr Kenny Matampash, Project Co-ordinator
SARDEP	Mr I. van Honig, Director
SARDEP	Dr Jackson, Co-ordinator
Farm Africa, Nairobi	Mr Brian Heath
Farm Africa, Meru	Dr P. Mutia
Farm Africa Meru	Dr Kabeira
Mathare Community Outreach	Pastor Daniel Otugu
Mathare Community Outreach	Mrs Magdaleine Otugu
ASAL, Arid Baringo	Dr Parklea, District Project Co-ordinator
ASAL, Arid Baringo	Mr Asava Naphas, District Finance Officer
Dupoto and Maa	Mr ole Timoi
GTZ	Mr Mwangi Njiuri
Oxfam, Lesiriken	Mr Robert Lenfano
IFAD	Dr A. Ratemo
Mara Conservancy	Mr Brian Heath, Chairman
Mara Conservancy	Mr David Nkedyane, Consultant
AGREF	Dr Sam Chemo, Director
Transmara Council	Mr ole Kijiabi, Local Councillor
Group Ranch Olenkoitu, Maasai Mara	Mr Jackson Mpario
District Veterinary Officer Garissa	Dr David Wawelo, Deputy DVO
District Livestock Production Office	Mr Charles Ikunu, DLO
District Livestock Production Office	Mr Rambura
Muthane Drug Shop	Mr M. Kiomi, Animal Health Assistant
District Veterinary Office Baringo	Dr D.S. Soo, DVO
ITDG (Kajiado)	Ms Sharon Looremata
District Veterinary Officer, Kajiado	Dr Kizee, DVO
District Veterinary Officer, Machakos	Dr Mwangi
Livestock Production Officer, Machakos	Mr Nkanya
ILRI	Dr Leornard Otieno
ASARECA	Dr Jean Ndikumana

Participatory Exercise

Livelihood Changes Diagramming
Livelihood activities (pie chart)

24 hour calendar/Gender analysis
 Household/Personal timeline
 Social network Mapping
 Livestock Service Mapping
 Social Stratum Mapping
 Historical Trend Analysis
 Institutional Mapping
 Human Health Service Mapping
 Offtake Price analysis
 Livestock Production and
 Management Calendar
 Livestock Disease
 Ranking/Seasonality Scoring
 Poverty Characteristics Diagramming
 Rangeland Resource Mapping
 Seasonal Calendars
 Assets Ranking
 Resource Flow Maps

Focus groups were also held across the country to further explore specific issues in animal health, husbandry, access to veterinary services, gender and poverty issues. The following table offers the location and gender breakdown of the groups.

District	Community	Men	Women
Machacos	Utithini		2
Machakos	Kwathibembe		5
Meru	Nyaki	20	7
Meru	Kanja		1
Meru	Mwanganthi	3	10
Nairobi	Kariobangi		4
Nairobi	Dagoretti		3
Baringo	Kipsaraman	2	
Kajiado	Sajiloni	1	1
Kajiado	Sajiloni	2	
Kajiado	Sajiloni	7	1
Kajiado	Oititi	3	
Kajiado	Sajiloni		3
Kajiado	Pelewa	2	5
Nairobi	Kariobangi		
Samburu	Leserikan	4	1
Samburu	Nachola	13	6
Samburu	Nachola		7
Samburu	Kawap	4	
Arid Baring	Kapunyang	5	
Limuru	Kaingo	5	6
Machakos	Masii	13	11
Machakos	Masii	10	
Transamara	Kimintet	5	
Transmara	Kawai	44	8
Garissa	Bulla College	3	
Nairobi	Mathare Valley	3	1

Nairobi	Mathare Valley	7	2
Nairobi	Mathare Valley	10	
TOTAL		166	84

Bolivia

In Bolivia, 91 communities participated in the study. A total of 931 household-level interviews were performed and approximately 150 individuals took part in the LPA exercises with a further 172 individuals participating in the village-level focus groups. Dr Johan Pottier, SOAS aided in conducting the initial stakeholder meetings at the community level. Four large-scale meetings were held across Santa Cruz Department, with approximately 150 poor farmers attending. Follow-up meetings were also held with local communities to build upon the issues raised. The following table outlines the location, number of participants and gender breakdown.

Community	Men	Women
Yapacani	20	5
San Julian	17	10
Sanja Honda		15
San Isidro	25	10
Pacai	15	
Kaipepe	20	10
Machipo	23	11
Tarenda	15	7
TOTAL	135	68

Furthermore, stakeholder meetings were held with decision-makers at the national and Departmental level. In total, 18 institutions took part, as described by the following table.

Institution	Participant
UNIVEP	Dr Jim McGrane, Director
UNIVEP	Dr Erik Eulert
UNIVEP	Dr Jonathan Rushton
Heifer Project International	Dr Roger Hinojosa Hurtado, National Director
World Concern	Ms Lourdes Alarcon, Coordinator
CIPCA	Dr Magaly Moron, Veterinary Doctor
CIPCA	Ms Maria Moron, Director
World Vision	Mr Walter Rondon
World Vision	Mr Herman Soruco
PDA Barrios	7 representatives
CARITAS	Mr Alfonso Martinez
CARITAS	Mr Richard Gonzales,
World Concern, Santa Cruz	Dr Susan Stuart, Consultant
CIPCA Charagua	Mr Eulochio Nunez, Project Manager
Prefectura Departamental, Sucre	Mr Vicente la Torres
Agrocentral, Sucre	Mr Arturo Serrudo
Agrocentral, Sucre	Mr Juan Morales, Director
Adeplech, Sucre	Mr Gunnar Serrudo, Director
ANED, Sucre	Ms Barbara Kupfer
ACLO, Sucre	Mr Mario Torres

ACLO, Sucre	Mr Roberto Pozo
ACLO, Sucre	Mr Antonio Oblitas
Socodevi, Sucre	Ms Rachel Tardieu
Mink'a, Potosi	Mr Mario Estrado, Administrator
Mink'a, Potosi	Mr Alejandro Taboada
Prefectura Departamental, Potosi	Mr Mario Guerra
ACLO, Potosi	Mr Felix Muruchi
FADES, Potosi	Mr Gustavo Velasquez Bejarano

Finally, the following table illustrates the location and gender composition of the focus groups held at the village level.

Community	Men	Women
Barrios		11
Tomina	5	
San Francisco	12	2
Kaipepe	6	11
Machipo	12	
Pueblo Nuevo	5	7
El Condor	6	
San Rafael		9
Buey Tambo	3	5
Simollie	4	8
Pumawaikillo	11	
Pacai		3
Canada		5
Strongest		
Rumi Cancha	3	2
La Compuerta	9	6
Mojtulo	3	
Chuqui Chuqui		2
Chaco	4	4
Sopa Chui	6	
Vaca Guzman		2
San Isidro		6
TOTAL	89	83

India

In India, a total of 106 communities took part in the study with 1,314 household-level interviews. Approximately 180 poor households took part in the LPA exercises with a further 431 individuals participating in focus groups held at the community level. The following table further details the actors and agencies that were consulted by the project:

Institution	Participant
ACORD	Dr Neena Gulabani, Director Resource Development
ACORD DFID (New Delhi and Bhubaneswar)	Ms Gurpreet Bathia, Associate Director Mr Simon Croxton, Senior Rural Livelihoods Advisor
PRADAN Action for Food Production (New Delhi)	Ms Shmita Mohanti Dr R.T. Kulkarni
CARITAS (New Delhi)	Mr P.J.Lukose
Chetanalaya (New Delhi)	Father Devadhas, Director
Chetanalaya (New Delhi)	Mr Bhoopesh Tripathi, Project Manager
Centre for Research Planning and Action (CERPA)	Mr S.P. Ahuja, President
Centre for Research Planning and Action (CERPA)	Mr S.N. Malik, Associate Director
Heifer Project International (New Delhi)	Dr Pran Bhatt, Country Director
Action Aid (New Delhi)	Mr Ravi Pratap, Livestock Specialist
CARE (New Delhi and Bhubaneswar)	Mr Depinder Kapur, Director Natural Resources
DEEPALAYA	Mr Avijit Dey, Communication Officer,
DEEPALAYA	Mr K.C. Pant, Senior Officer Programme
Swiss Agency for Development and Cooperation	Ms Lucy Maarse, Head NRM Sphere and IC delegate
Tribal Welfare Society	Ms Maria Mangte, Director
Vision of India	Mr Krishna Sharma, Chairman
DANIDA, Royal Danish Embassy	Mr Jes.C. Boye-Moller, Deputy Head of Mission
Oxfam	Mr S. Carvalho,
Asian Centre for Organisation Research and Development, Bharatpur	Ms Sushma Sharma, Programme Officer
Livestock Development Office, Bharatpur	Dr K.C. Gupta, Assistant Director
Veterinary Unit, Bharatpur	Dr Rajiv Singhal, Veterinary Surgeon
Veterinary Mobile Unit, Ajmer	Dr Verendi Gandhi, Veterinary Officer
Valsad District Co/op. Milk Producers Union Ltd.	Dr. E.K. Chaudari, Manager
Alipur, Nausari, Gujarat	Dr R.B. Patel, Head of Department of Extension Education
Gujarat Agricultural University, Nausari	Dr R.K. Sinha, Manager Fodder Development
Valsad District Co/op. Milk Producers Union Ltd.	Dr D.G. Shanki, Assistant Director
Alipur, Nausari, Gujarat	Dr T.V. Hinsu, Veterinary officer,
Animal Husbandry, Poultry Disease Investigation, Nausari	Dr. S. Ramkumar, Associate Professor
Department of Animal Husbandry, Nausari	Prof. Rao, Head of Department
Rajiv Gandhi College of Veterinary and Animal Science, Pondicherry	Dr G. Krishnaraj, Assistant Director
Rajiv Gandhi College of Veterinary and Animal Science, Pondicherry	Dr F.R. Sheriff, Director of Extension
Animal Husbandry Department, Trichy, Tamil Nadu	
Tamil Nadu Veterinary and Animal Sciences	

University, Chennai Veterinary University Training and Research Centre, Trichy Madras Veterinary College, Chennai AFPRO Task Force, Bhubaneswar CYSD/Plan Project, Bhubaneswar CYSD/Plan Project, Bhubaneswar Indo-Swiss Natural Resources Management Programme Orissa Veterinary Unit, Pipili Family Planning Association of India, Mumbai Akansha, Mumbai Akansha, Mumbai YUVA, Mumbai Welfare Society of Stray Dogs Welfare Society of Stray Dogs Don Bosco School	Education Dr M. Babu, Professor and Head Dr A. M. Basheer, Associate Professor Mr J. Shrinath Mr Haris Singh, Project Co-ordinator Dr P. Routray, Programme Manager Mr J. Morrenhof, Director Dr G.C. Bidhar, Veterinary Officer, Mr K. R. Sreenath, Director Resource Development Ms Neha Dalal, Social Worker Ms Manije Kelkar, Public relation officer Ms Sugandhi Baliga, Human Resources Manger Ms Deepa Suryanarayan, Volunteer Mr Suresh Naidu, Volunteer Father Steve Rodriguez, Director
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In each community, the following participatory exercises were performed as part of the Livestock Poverty Assessment:

Livelihood Changes Diagramming
Livestock Service Mapping Seasonal Calendars 24-hour Calendars Village/Resource Mapping Livestock Management Calendars Milk Production Calendars Livestock Disease Ranking Problem Ranking Livestock Problem Ranking Offtake Price Analysis Historical Trend Diagramming Livelihood Activities (pie charts) Livestock Disease Ranking Venn diagrams (Livestock Services) Venn diagrams (Local Institutions) Expense/Investment ranking Community Values diagramming Social Network Mapping

Furthermore, a total of 33 focus groups were conducted. The focus groups explored different issues related to livelihoods, livestock services, gender and social exclusion. The following table offers the gender breakdown and location of the groups:

State	Community	Men	Women
Haryana	Kanhai		18
	Indra Kan	11	9
	Sunda Nagri	12	8
Rajasthan	Banjara Ka Nagla	12	
	Noh		11
	Nachi Bauri		10
	Boudol	5	4
	Ragunat Pura	9	1
Gujarat	Pisangan	5	
	Ghuda	2	6
	Tawri Parsivan	3	4
	Matwar	6	8
	Dandi	2	8
	Pathri	15	
	Suldra		20
	Mowas	3	6
	Amabari	12	8
	Singad	3	11
	Pondicherry	Manapet	
Silkani Pale			5
Karicla Pacham			8
Tiruvandur Koi		1	20
K.P. Nattam			6
Tanga Tittu			7
Mamparai		9	2
Tamil Nadu	Gandhi Nagar	6	17
	Avaloor		20
	Madhi Barampur	7	
Orissa	Bonda Guda	12	5
	Gopal Put	4	10
	Mach Put		17
	Bariguda	22	
	Baghvua	5	19

TOTAL		166	275
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Data Analysis

All data was coded and entered into and a data base was created in Access for each country. The data was analysed utilising both Access and Excel and Gen Stat. As previously mentioned, the analytical framework for the research was a Simplified Livelihood Framework. Furthermore, the discourse generated in the participatory techniques and the individual interviews were analysed using a variety of discourse analysis tools such as Halliday's Functional Grammar Framework and thematic analysis.

Outputs

The project achieved all its core and ancillary outputs as listed in the PCSS.

1. Livestock Poverty Assessment (LPA): The LPA methodology is comprised of 14 participatory tools which have been refined and adapted to meet the needs of livestock development practitioners (see Appendix I).
2. An Assessment of Livestock in the Livelihoods of the Poor: Key findings are offered in Appendix II.
3. Key parameter assessment: Methods to assess the key parameters are offered in Appendix I. Results across the three target countries are available in the project reports.
4. Policy Recommendations: Policy recommendations are offered in the preliminary and final reports:
 - a. *The Delivery of Veterinary Services to the Poor: Preliminary findings from Kenya.* (www.livestockdevelopment.org)
 - b. *Livestock and Poverty Alleviation: Issues in the Delivery of Livestock Services to the Poor* (forthcoming).

Contribution of Outputs

By enhancing practitioners understanding of the lives and livelihoods of the poor, the study will aid DFID in halving global poverty by 2015. Indeed, the study findings demonstrate that livestock are an underutilised tool for poverty alleviation. Further, the sustainability of livestock-based livelihoods may be enhanced via low-cost inputs to increase the access and affordability of animal healthcare for the poor.

The project plans to continue to disseminate findings via both formal and informal mechanisms. A book and additional papers will be forthcoming over the course of the next year.