

# Donkeys and the provision of livestock to returnees: lessons from Eritrea

by

**Andy Catley and Stephen Blakeway**

*Network, 4F2, 51 Salisbury Road, Edinburgh EH16 5AA, United Kingdom*

## Abstract

*This paper outlines the provision of livestock to returnees as part of a large-scale, integrated resettlement project in Eritrea. Before procurement of livestock, returnees were interviewed in order to understand their preferences for different livestock types. Based on the results of the interviews, the number of donkeys provided by the project was increased by up to 7.3 times the number in the original project plan. Both female- and male-headed households opted to receive donkeys. The paper discusses the role of donkeys in 'restocking' projects and advocates participation of beneficiaries in the identification of appropriate livestock inputs.*

## Introduction

Following the resolution of the Eritrea-Ethiopia conflict in 1991, it was estimated that 500,000 Eritrean refugees were living in eastern Sudan. In order to begin the organised repatriation of refugees, the Eritrean government worked with United Nations (UN) agencies to design the 'Programme for Refugee Reintegration and Rehabilitation of Resettlement Areas in Eritrea' (PROFERI). The pilot stage of PROFERI aimed to repatriate 4500 refugee families (25,000 people) and offered assistance in the form of shelter, rations, water supplies, clinics, schools, improved roads and provision of seeds, tools and livestock. These inputs were funded by non- governmental organisations (NGOs), bilateral donors and UN agencies, and were to be delivered through the line ministries of the Eritrean government.

In the PROFERI Pilot Project, returnees were expected to return to nine resettlement sites in western Eritrea and engage in agricultural and livestock rearing activities. A livestock 'package' comprising different species of livestock was designed for the returnees and these animals were to be provided as a free gift to every household. At this stage of the project the package did not relate to individual households but to groups of 500 households (the number of households

expected to return to each official resettlement site). Livestock packages for 3250 families were joint-funded by Christian Aid, Oxfam UK/Ireland and the British Department for International Development (formerly the Overseas Development Administration).

The livestock component of the PROFERI pilot project was not considered by the authors to be a 'restocking' project. Restocking is usually defined by NGOs as the supply of a minimum viable herd (eg, around 30 small ruminants and a donkey) to destitute pastoralists in order to enable a rapid return to self-sufficiency and use of grazing resources away from settlement sites.

Livestock are an essential feature of Eritrea's rural economy and food production systems. These systems vary from crop-based highland farming which is reliant on oxen for plowing, to lowland pastoralism involving mixed herds of camels, cattle, small ruminants and donkeys. An agriculture and food production assessment in 1988 surveyed 382 villages and categorised production systems in Eritrea as agricultural, agropastoral and pastoral according to the degree of dependency on livestock (University of Leeds, 1988). The survey grouped mules and donkeys as 'pack animals' and gave some indication of their importance by presenting results of villagers' ranking of livestock types (Table 1).

In the pastoral, agropastoral and agricultural sectors pack animals were ranked as 3rd, 4th and 2nd most important livestock type. Although the survey acknowledged that livestock were the primary means of support for pastoral households and essential for agropastoral households, the survey focused on the agricultural sector (281 out of 382 villages surveyed). Also, the survey did not explain why pack animals were considered to be important in the villages surveyed.

**Table 1: Importance ranking of livestock in Eritrean villages**

Sector	No. of villages surveyed	Livestock ranks as percentage of total ranks for each sector					
		Goats	Pack animals	Cattle	Oxen	Camels	Poultry
Pastoral	36	34	23	13	2	27	0
Agropastoral	65	27	21	22	3	26	1
Agricultural	281	22	22	19	22	9	6

Source: adapted from University of Leeds, 1988

### Reassessment of the PROFERI livestock packages

During the design of the PROFERI project contact with Eritreans living in refugee camps in Sudan had been minimal. Consequently, very little was known about the sites where people wished to resettle (and if their preferences matched the nine official resettlement sites) or returnees' expectations in terms of preferred means of livelihood. The lack of returnee participation in the project prompted a reassessment of the livestock input, with a focus on the suitability and relevance of the livestock packages. The need to review the provision of livestock to returnees was heightened when more people than anticipated chose to return to lowland areas, particularly in Gash Setit province in the south-west of the country. Up to April 1995, 4018 returnee families had returned to Gash Setit supported by PROFERI instead of the planned 1000 families. This placed an additional burden on local authorities such as the Ministry of Agriculture (MoA), as they were responsible for delivering PROFERI inputs to the returnees.

Looking at the lowland livestock package more closely, the PROFERI plan aimed to deliver only 50 donkeys per 500 households (1 donkey per 10 households) although most of the Eritrean returnees from Sudan were former agropastoralists or pastoralists. Although it was not known whether these people wished to resume herding activities, typical restocking projects with pastoral groups have included one donkey per household. For example, in the World Food Programmes restocking work in Turkana, Kenya, Bush (1992) noted that *'The restocking package included one donkey, a maize ration and practical household items geared for women's needs. These components are essential: the donkey ensures mobility and the maize ration prevents offtake from the livestock before they begin to reproduce*

*and supply milk'*. Also in Kenya, Oxfam's restocking projects provided pack animals (mostly donkeys but also some camels) in order to assist movement of pastoralists and allow restocked families to transport belongings, transport young animals and collect firewood and water (Kelly, 1993). Based on the Kenya experiences, it seemed likely that PROFERI had underestimated the need for donkeys among Eritrean returnees.

### Information from resident livestock owners

Project staff conducted discussions with livestock owners in Senhit, Barka and Gash Sehit provinces which were based on semi-structured interviews supported by a livestock species ranking tool. The latter involved a pair-wise comparison of livestock types by informants in order to produce a list of indicators which they associated with livestock. Each indicator was then ranked by the informants from 0 (lowest rank) to 5 (highest rank). An example of results from livestock species ranking is shown in Table 2 in order to show the type of information which was generated by the tool.

In this example, donkeys were valued for their use as pack animals, carriage of water and production of dung. Also of note was that after goats, donkeys were considered to be the most useful animals for 'poor' people. This was explained by the importance of donkeys for transporting water, firewood or other items and the possibility of hiring out a donkey to other people. One man summarised the importance of donkeys by saying *'A man without a donkey, is a donkey'*. Repetition of discussions and the ranking tools in different sites and with both female and male informants generated qualitative data and enabled project staff to improve their understanding of local preferences for livestock types.

### Information from returnees

All returnee households were interviewed in order to determine their preferences for different types of livestock to be provided by the PROFERI

**Table 2: An example of livestock species ranking: Senhit province**

<i>Indicator</i>	<b>Livestock species</b>					<i>Notes</i>
	<b>Goat</b>	<b>Sheep</b>	<b>Cattle</b>	<b>Donkey</b>	<b>Camel</b>	
Milk production	3	4	5	0	0	camel milk not consumed
Reproduces quickly	3	5	4	2	1	
Sale value	2	3	4	1	5	
Used for transport <sup>†</sup>	0	0	0	5	4	transport of goods and commodities
Used for plowing <sup>†</sup>	0	0	5	0	0	hard, stony ground too difficult for camel and donkey to plow
Carries water	0	0	0	5	0	refers to 'everyday' water carriage; camels used occasionally
Adapted to local area	3	4	5	2	0	indicator relates to suitability of browse, terrain and climate
Used for marriage	4	0	5	0	0	dowry payments
Meat production	3	5	4	0	0	camel and donkey meat not consumed
Use hides/skins	4	3	5	0	2	
Dung for fertiliser	2	2	5	4	0	sheep and goat dung thought to damage some types of seed
Disease resistance*	1	2	3	4	5	
Good for poor person*	5	0	3	4	0	goats good as very low purchase price
Good for poor woman*	5	0	3	4	0	

*Informants: Four Bilen men from Orthodox Christian village*

<sup>†</sup> *Potential income generating activity*

\* *Indicators chosen by the interviewer*

project. The interviews were conducted by staff from the Animal Resources Department (ARD) of the MoA, and the Commission of Eritrean Refugee Affairs (CERA). Up to April 1995, 2090 households had been interviewed comprising 592 female-headed households and 1498 male-headed households. As the budget for each household was set at US\$ 420, it was possible for returnees to select more than one type of animal.

Interview results are presented in Tables 3 and 4. Table 3 shows that sheep (92% households), goats (90% households) and donkeys (61% households) were by far the most popular types of animals selected and that the preferences of female and male-headed families were similar. Only when opting to receive camels was there a significant difference between female and male-headed households.

In Table 4 results were summarised as 'Number of animals required per 500 households' in order to allow comparison of returnees' preferences for livestock with the lowland livestock packages proposed in the PROFERI project plan. The lowland package was used in the comparison because most of the returnees chose to settle in lowland areas. In terms of the number of donkeys required by returnees, in every resettlement site more donkeys were required than was anticipated by the PROFERI project design team. This was most evident in Adi Bidho where the number of donkeys to be supplied was increased from 50 donkeys/500 households to 366 donkeys/500 households.

#### ***Returnee interview results and bias***

The onset of the PROFERI pilot project was delayed by more than six months due to prolonged

**Table 3: Livestock preferences among Eritrean returnees in the PROFERI pilot project**

<i>Livestock type</i>	<i>Number of households requesting livestock type</i>			<i>Comparison of female- and male-headed households</i>
	<i>Total households (n=2090)</i>	<i>Female-headed households (n=592)</i>	<i>Male-headed households (n=1498)</i>	
Donkey	1270 (61%)	359 (61%)	911 (61%)	ns
Sheep	1928 (92%)	541 (91%)	1387 (93%)	ns
Goat	1889 (90%)	530 (90%)	1359 (91%)	ns
Cow	342 (16%)	104 (18%)	238 (16%)	ns
Ox	62 (3%)	16 (3%)	46 (3%)	ns
Camel	132 (6%)	26 (4%)	106 (7%)	P <0.05

Source: adapted from Catley, 1995

Returnees could select livestock packages comprising more than one livestock type, therefore the total number of requests is greater than the total number of households.

Chi squared test used to compare requests from female and male-headed households by livestock type  
ns = Not significant.

negotiations over the official repatriation agreement. When returnees did eventually begin to move back to Eritrea many of the official resettlement sites were ignored and large numbers of people opted to live in Gash Setit province (4010 households from a total of 4500 households in the project). Regarding the implementation of the livestock component of PROFERI, these problems placed an unexpected burden on the provincial ARD who became responsible for procuring livestock for around 4000 families.

Due to the limited resources of the ARD and its commitment to other activities, the system used to

interview returnees was based on a very simple questionnaire which focused on preferences for different livestock species within the US\$ 420 per household budget. It was recognised that although this approach was an improvement on the original lowland package in the project plan, the interviews with returnees provided virtually no information on the reasons why people opted for particular species of animal. In part, it was hoped that this omission could be rectified through project monitoring and evaluation.

Another problem with the simple questionnaire was that no information was collected on the

**Table 4: Livestock preferences of returnees in four lowland resettlement sites compared with PROFERI Pilot Project Plan**

<i>Number of animals required per 500 households according to:</i>	<i>Type of livestock</i>					
	<i>Camels</i>	<i>Donkeys</i>	<i>Cows</i>	<i>Oxen</i>	<i>Sheep</i>	<i>Goats</i>
PROFERI Pilot Project Plan	50	50	100	150	1000	1000
Interviews (n) with returnees in:						
Goluge (n=682)	56	325	58	36	1607	1607
Adi Bidho (n=441)	16	366	11	0	2237	1932
Gergef (n=808)	14	266	127	2	1944	1944
Hagaz (n=159)	65	296	119	8	2452	1413

Source: Catley, 1995

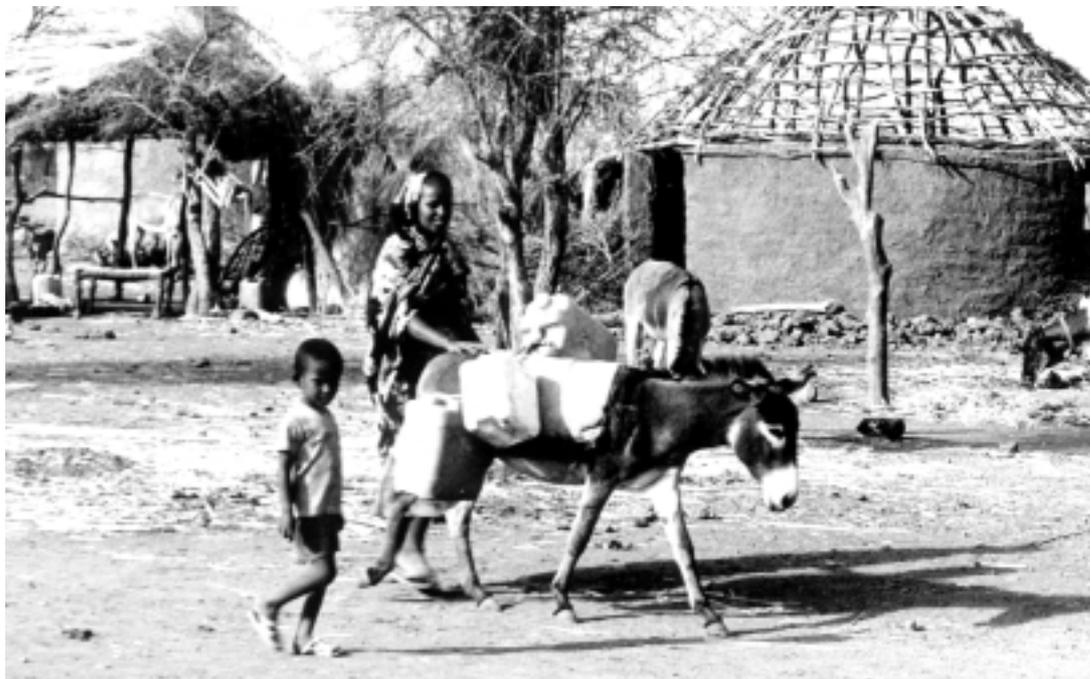


Photo: Andy Catley

*Photo 1: A donkey supplied by PROFERI being used to carry water, Goulge resettlement site, Gash Setit province, Eritrea. In the background a new returnee house is being constructed*

existing livestock assets of returnees. Consequently, it was not possible to determine whether returnees' choices were affected by their current livestock holdings eg, a woman who already owned a donkey might be less likely to want a second donkey from the project. Work in refugee camps in Sudan showed that some Eritrean refugees did own animals although it was also noted that accurate data on livestock numbers was difficult to obtain for cultural reasons and fear of taxation (Kibreab, 1987).

Uncertainty over plowing was also a possible source of inaccuracy in the interview data. All returnee households were allocated plots of agricultural land by the Eritrean authorities but it was not clear whether the MoA would provide a tractor service for plowing this land. At the time of the interviews the expectation among returnees for the tractor service was high and it was likely that if oxen were supplied by PROFERI, these animals would not be distributed until after the main plowing period. This may explain why relatively few oxen or camels were selected.

The final and perhaps most important concern regarding the interview data was that all returnee

households were to receive animals regardless of their preferred means of livelihood. Consequently, people who wished to engage in non-agricultural activities may have selected animals which could be sold immediately for a reasonable price, or donkeys and camels which could be used for income generation purposes. Again, it was hoped that project monitoring and evaluation would show how the livestock had benefited the recipients.

### **Project monitoring and evaluation**

The monitoring system for the livestock component of PROFERI was based on a structured list of questions and exercises such as proportional piling and ranking tools. The system was designed according to the limited material and human resources of the ARD, and aimed to include information on the socio-economic impact of livestock provision to returnee households and communities, as perceived by the returnees themselves (Blakeway, 1995). Rather than attempting to closely monitor all beneficiaries, a small sample of 303 households (8% of all households receiving livestock) was selected for repeated visits by the monitors. The monitoring sample reflected species variations in the livestock

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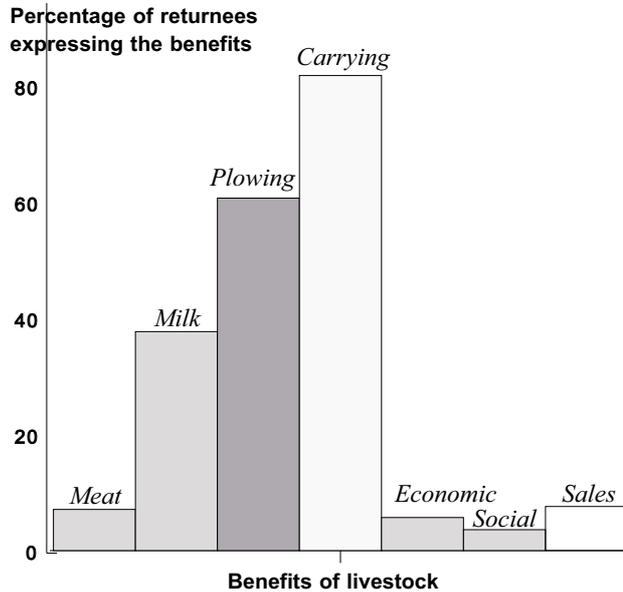


Figure 1: Benefits of livestock cited by returnees

packages between households according to the results in Table 3.

In December 1995 an evaluation of the PROFERI livestock input was conducted. This work included collation of the monitoring data which had been collected during the first six months after the provision of animals to returnees. The data included information on project impact such as the benefits of livestock ownership as perceived by returnees. Transportation (82%), plowing (61%) and milk production (38%) were the most commonly reported uses of livestock by returnees who had received animals suitable for these purposes under PROFERI (Figure 1). Most of the transport activities were related to donkeys rather than camels and it was noted that problems with camels seemed to cause greater disappointment than problems with donkeys. This finding may have been related to the higher monetary value of camels. Some families mentioned sharing of donkeys with neighbours.

## Conclusions

This paper outlines a large-scale rehabilitation and resettlement project for returnees in which the need for donkeys, as perceived by central planners, was underestimated. The PROFERI pilot project design team included an agricultural

economist from the MoA in Eritrea but did not include animal production or veterinary staff from the ARD. After consultation with returnees, the number of donkeys supplied by PROFERI was increased and initial monitoring indicated that these animals had been put to good use.

The authors propose that donkeys are a very important form of assistance to impoverished families. Donkeys are used by pastoralists, agropastoralists, sedentary farmers and town dwellers and are particularly useful for women who may have responsibility for collecting water or firewood. In common with pack camels, donkeys can be used immediately after distribution and therefore can have a rapid impact on households. The benefits derived from small ruminants or cattle, although considerable, may take several months to materialise and during this period the animals need to be properly managed. Donkeys are relatively

inexpensive, easily managed and tend to suffer from fewer health problems than other types of livestock.

The livestock component of PROFERI illustrated how the participation of beneficiaries, even at a superficial level, can lead to more appropriate and beneficial livestock inputs. It is hoped that further monitoring work will provide information not only on donkeys, but also on the other types of livestock which were provided by the project. Later stages of PROFERI should adopt a more flexible and participatory approach to project design relative to the pilot project.

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*Photograph (opposite): Woman learning to plow with donkeys in Tanga, Tanzania*

*Photo: Paul Starkey*