

MINISTRY OF FINANCE AND ECONOMY POVERTY RESEARCH GROUP



UNDP/SIDA "Poverty Research and Employment Facilitation for Policy Development", MON/01/U01 Project

STUDY REPORT

OPTIONS FOR BRINDING HERDERS' ASSETS INTO FULL PRODUCTIVE USE



Ulaanbaatar, Mongolia 2004 Ministry of Finance and Economy Poverty Research Group

UNDP/SIDA "Poverty Research and Employment Facilitation for Policy Development", MON/01/U01 Project

STUDY REPORT

"AN EXAMINATION OF THE EFFECTIVENESS OF HERD RESTOCKING STRATEGIES IN BUILDING AND SECURING THE INCOMES AND THE LIVELIHOODS OF HERDER HOUSEHOLDS"

Prepared by:

L. Naranhuu D. Shombodon B. Jandagsuren S. Amgaa Ts. Altanbat

Advisor:

Richard Marshall, PRG Sh. Munkhsteren, PRG

Ulaanbaatar, Mongolia

2003

FOREWORD

The Poverty Research and Employment Facilitation project (PREF) is a UNDP supported policy intervention with funding from the Government of Sweden. The Poverty Research Group is a component of this project, and was established in July 2001, under the supervision of the Ministry of Finance and Economy.

The immediate project objective of PRG was to strengthen national capacity in the areas of poverty research, formulation, analysis and monitoring of poverty indicators. And in line with this PRG let and then managed several subcontracted pieces of research during 2003.

We are delighted therefore to introduce this first report of these subcontracted works, on the effectiveness of herd restocking strategies in terms of how they help secure the livelihoods of herder households.

In recent years severe weather conditions have decimated herd numbers, and restocking has emerged as an important policy response to this. This research has paid critical attention to evaluate past and ongoing restocking programmes, examining alternative ways to make restocking more successful in increasing herder households incomes and in protecting them from vulnerability. And the PRG has highlighted a number of practical policy recommendations based on the findings of the research team.

At the same time, the Government has developed and adopted the Economic Growth Support and Poverty Reduction Strategy, and the research findings presented here are closely allied to the national poverty strategy goals. This report therefore represents a contribution to the process of developing operational policies for reducing rural poverty.

The research was conducted over seven months of 2003 and was carried out by a team based at the School of Economics and Business, at the Mongolian State University of Agriculture.

During the summer the PRG organized a series of regional seminars culminating in a national conference to disseminate the results of the research to policy makers, NGOs, herders associations, local government officers and civil society. Participants contributions and proposals have been taken account of in the report where appropriate.

Finally, PRG is currently working to bring together the salient points from all of the subcontracted research studies, by developing a policy paper to be presented to policymakers and the Government.

Mr. J. JARGALSAIKHAN

Director of Economic Policy Planning & Economy Government of Mongolia

Mrs. P. TSETSGEE

National Project Manager UNDP Poverty Research and Employment Facilitation for Policy Development

CONTENT

Project team	5
List of tables	6
Figures	7
Abbrieviations	8

CHAPTER ONE: INTRODUCTION

Background	9
Goal & objectives	10
Activities	10
Research data	12
Content of interview researches and questioners	13

CHAPTER TWO: METHODOLOGY

Methodology of development of research materials	16
Sampling	17

CHAPTER THREE: REASON OF RESTOCKING

Socio-economic situation of Mongolian herders	21
Characteristics of pastoral animal husbandry: strengths and weaknesses	23
Reasons of restocking activities	24

CHAPTER FOUR: RESTOCKING PROCESS

Number of aimags, soums, and households involved in the restocking	
programmes and number of animals provided	30
Restocking process in the aimags involved in the study	34
Sponsors of restocking programmes	44
Criteria for selection of beneficiaries	50

CHAPTER FIVE: OUTCOME OF RESTOCKING ACTIVITIES **INFLUENCING FACTORS** Number and composition of livestock of the households involved the restocking 55Evaluation of the results of restocking 56 CHARTER SIX : WAYS TO IMPROVE RESTOCKING ACTIVITIES 68 Comments about the ways to improve the restocking program Herders' vision of future 69 CHAPTER SEVEN: WAYS TO IMPROVE THE LIVELIHOOD OF HERDERS Characteristics of objective to improve the livelihood of the herders 71A model for restocking programme implementation 74**CHAPTER EIGHT: RECOMMENDATIONS & CONCLUSION** 76 82 Bibliography

PROJECT TEAM

Project Manager

Lhamsuren NARANHUU Doctor of Economics (Ph.D) Professor at School of Business and Economics, State Agricultural University

Members:

Baasanjav JANDAGSUREN Doctor of Economics (Ph.D) Professor at School of Business and Economics, State Agricultural University

Dorlig SHOMBODON Doctor of Social Science (Ph. D) Senior Manager of Business Development Agency

Sonom AMGAA Doctor of Economics (Ph.D) Professor at School of Business and Economics, State Agricultural University

Tsedevsuren ALTANBAT Doctor of Economics (Ph.D) Head of Department of Management, School of Business and Economics, State Agricultural University

LIST OF TABLES

Table 1.1 Number of respondent households Table 2.1 Selection of aimags involved in the restocking programmes Table 2.2 Research on damage level Table 2.3 Selection of soums of Dundgobi Table 2.4 Representative capacity of the study Table 3.1 Some indicators highlighting the social and living condition of herders (in thousand households) Table 3.2 Estimation of income and expenses of herdng households (Cases of Ider and Erdenkhairkhan soums of Zavkhan Aimag) Table 3.3 Strengths and weaknesses of pastoral animal husbandry Table 3.4 Damages of the dzud disasters, as of the recent years Table 3.5 Reasons of restocking activities Table 4.1 Locaions restocking programmes and numbers of aimags, soums and herding households involved Table 4.2 Herding households included in the Dundgobi programme Table 4.3 Number of livestock of households before the provision of livestock under the restocking programme, by household composition Table 4.4 Sponsors of restocking programmes Table 4.5 Herding households included in the programmes Table 4.6 Change of number of animals in per household, by soum average Table 4.7 Migration of households left with few or no livestock Table 4.8 Herding households included in the programmes in Bayankhongor Aimag Table 4.9 Number of households involved in the restocking programmes Table 4.10 Number of animals (by group) provided to beneficiaries Table 4.11 Training sessions Table 4.12 Examination of effectiveness of the restocking programme in Khuvsgul Aimag Table 4.13 Income grouping of beneficiaries. Table 4.14 Selection of soums to be involved in the study Table 4.15 Budget allocation for the programme of restocking the herder households who lost most or all of their livestock holdings Number of aimags and soums involved in the PRP restocking Table 4.16 programme & number of livestock holdings provided Table 4.17 Average number and composition of livestock holding provided through the restocking programme Table 4.18 IFAD sponsored herd-restocking project Table 4.19 Restocking with the finance of the Sankei Newspaper Table 4.20 Criteria for selecting the beneficiaries, local authorities' view Criteria for selecting beneficiaries (Herders' view) Table 4.21 Table 4.22 Role of local authorities Table 4.23 Characteristics, strengths and weakness of the aimags and soums implemented restocking program

Table 5.1	Average number of livestock of the households involved in the study
Table 5.2	Livestock composition of the households involved in the study, by
	animal types (%)
Table 5.3	Evaluation weight whether the restocking program was right activity
	or not
Table 5.4	Changes of the livestock numbers received during the livestock
Table 5.5	Productivity change of herder households
Table 5.6	Grouping of herder households by the number of livestock
Table 5.7	Opinion weight of the impact of restocking for the livelihood of herders
Table 5.8	Asset supply of households involved in the study (weight percentage of total value)
Table 5.9	Asset supply of households involved in the study by aimags (weight percentage of total value)
Table 5.10	What would have happened if the restocking program did not take
	place
Table 5.11	Number of households grew their livestock after being involved in
	the restocking program
Table 5.13	Reasons and factors that influenced to the lose of livestock received
	under the restocking program
Table 5.14	Reasons of losing livestock in drought and dzud (opinion weight)
Table 5.1	Description of herders involved in the study (by aimag)
Table 5.16	Description of herders involved in the study (by restocking)
Table 5.17	Education weight of the herders involved in the study.
Table 5.18	Availability of winter and spring settlements and grazing land capacity
	(weight percentage of total value)
Table 6.1	Suggestions for making restocking program more effective
Table 6.2	Proposal to improve the restocking methodology
Table 6.3	Ideas and comments about the future life
Table 6.4	Does the animal husbandry have a future?
Table 6.5	Supply situation of essential needs of herder households
Table 7.1	Different characteristics of livelihood levels of herder households
Figures	
Figures Figure1.1	Sequence of research
Figure1.1	Beggeng of motoching

- Figure 3.1 Reasons of restocking
- Figure 4.1 Aimags involved in the restocking programmes
- Figure 4.2 Aimags involved in the study
- Figure 5.1 Income composition of herder househol

ABBRIEVIATIONS

MFE	Ministry of Finance and Economy
PRG	Poverty Research Group
UNDP	United Nations Development Programme
IFAD	International Fund of Agricultural Development
MFA	Ministry of Food and Agriculture
MSUA	Mongolian State University of Agriculture
SEB	School of Economics and Business
NPAP	National Poverty Alleviation Programme

Aimags :

BH	Bayankhongor
BU	Bayan-Ulgii
SU	Sukhbaatar
HU	Hubsgul

CHAPTER ONE: INTRODUCTION

1.1. In this chapter, we briefly outline the effectiveness of the herd restocking programmers in Mongolia and the intention to conducting this research on the possible improvement of these activities as well as describing the goal, objectives, organization, and data used in the research.

Background

1.2. As a result of Mongolia's transition to market economy followed by privatization, herders in this country were subjected to ownership of their property, principally – livestock but also in some cases wells, other agricultural equipment and infrastructure. The statistical data shows that by 2000, 96.7 percent of the total livestock in the country was private-owned with an allotment of 135 animals per herding family; and 30.9 percent of livestock holding families were possessing more than 100 animals. But as a consequence of country-wide dzud winter and drought disasters that have taken place during the past years, the herders have suffered from drastic decrease in livestock numbers.

1.3. For instance, 1999-2000 dzud befell in around 70 percent of the territory of the country killed 3.4 million animals leaving 2.3 thousand herding families with no means of livelihood. The number of animals killed during the 2000-2001 dzud disaster reached 4.2 million and the number would be 50% if we add the young beasts that died from miscarriage caused by severe cold weather.

1.4. Taking place year after year, these severe weather conditions or so called dzud and drought disasters have left significant numbers of herding families with no or few livestock making them a key "vulnerable group" in society. In order to provide them with adequate means of livelihood and restock them, a significant amount of resources was spent from the state budget and by the international organizations as well. During the last dzud disaster alone, 10 million dollars were donated by Japan and further 20 million was funded by other resources.

1.5. For restocking purposes, 3000 herding families from 61 soums of 7 aimags were provided with numerous thousands of livestock on a credit basis by the Poverty Reduction Programme, International Fund for Agricultural Development (IFAD) and other international aid organizations. But the results and effectiveness of this activity have not been assessed yet.

1.6. Furthermore, there is a continuing debate concerning restocking and pastoralism among the scholars, specialists and managements of some enterprises. Through restocking, herders who lost all or most of their animals are provided with a mean of livelihood and a "second chance" to run the business they know. Despite these advantages, it has been known that the crude increases in the number of animals undermines the subsistence and survival capacity of herders against natural calamities questioning the productivity of rural livelihoods and encouraging a trend of welfare dependency amongst herders.

1.7. Caused by negligence, lack of herding skills and perverse incentives, a recurrent phenomenon is the loss or sale of the animals provided, which then requesting still for more animals. Therefore, in order to define the appropriate means of building and securing the incomes and livelihoods of herders, it is vital to assess the lessons learnt from restocking projects.

Goal

1.8. To examine and analyze the effectiveness of herd restocking activities for herding households who are the victims of drought and dzud disasters, prepare a recommendations on herd restocking strategies and ways to build and secure herder livelihoods.

Objectives

1.9. To achieve the above mentioned goal, the following objectives shall be accomplished:

1. To estimate the resources spent, examine the mechanisms adopted, and define the number of successful beneficiaries, with an increased animal holding as well as those with deteriorated holdings,

2. Explore the reasons of increases and decreases in the number of the beneficiaries' animals with linkages to mechanisms of restocking programmes, such as weather conditions during the implementation term, skills of the herders involved in the programme and other relevant factors,

3. By interviewing the representatives of the implementing agencies and the beneficiaries, determine the advantages and disadvantages of the projects.

4. Investigate the types of business, average incomes, consumption composition and consumption size of successful beneficiaries of the project and other thriving herding households in localities,

5. Measure the impact of natural calamity risks, herding skills and resourcefulness of the herders and other relevant factors in the production volume and income level of the herding households

6. Define whether the restocking projects, building and securing herder livelihoods by increasing the income of herding households and preventing poverty, were of positive impact on productivity enhancement of the agricultural sector,

7. By comparing the implementation mechanisms and organizations of the restocking projects funded by the government and donor agencies, examine if there are especially successful projects in terms of restocking activities and/or increase of livestock numbers.

Activities

1.10. The bidding for the project on "Examination of the effectiveness of herd restocking strategies in building and securing the incomes and the livelihoods of herder households" hosted by Poverty Research Group under Ministry of Finance and Economy started in January 2003 and our research work started after being awarded the contract.

The research work was conducted in 5 stages in which the following works were performed:

- 1. Obtain and analyze the documents of past studies conducted by relevant organizations,
- 2. Development of the research methodology,
- 3. Gather information,
- 4. Analyze the information,
- 5. Produce a final report.

1.11. During the first stage, around 40 pieces of materials including official documents such as resolutions, programmes, and regulations of the government as well as documents of past studies financed by the government and international organizations (i.e. final reports, seminar and conference materials, research articles) were reviewed.

1.12. On the basis of the materials reviewed, a research methodology was developed in the second stage. Questionnaires, tests, interview questions, formats, areas and methods of intervention research were prepared informed by the findings, recommendations and conclusions of the past studies.

1.13. In the third stage, a research team was assigned to work in countryside. The team had to do the initial research in aimag level to select the soums for study. After gathering the information in the selected soums, they determined the bagas, the next level of the research. The final level of the research was herding households which were selected to be researched in baga level. The management of soums and bagas were interviewed as well. In other words, the research was conducted in the following sequence:

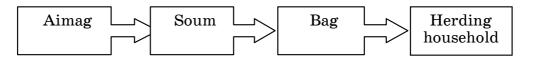


Figure 1.1 Sequence of research

Structured interviews were used in obtaining feedback and information from the herding households that are the beneficiaries of the restocking programms and from those who are not as well. Managements of aimags, soums and bagas were asked to fill in the main survey questionnaire. Organizations and individuals that took part in the implementation of the restocking programmes were interviewed and asked to fill in the questionnaire form.

1.14. Exploration of impacting factors and special characteristics of the condition in which the restocking was carried out, determination of strengths and weaknesses of the programmes, analyses of the research findings in multiple approaches and the selecting of the optimal approach by using tables, diagrams and estimation methods were the works carried out during the fourth stage.

1.15. In the 5^{th} stage, members of the research team discussed the structure of the report in three meeting sessions during which the final report was produced. Prior to the final report, progress reports were submitted to Poverty Research Group four times and it was during this time when the development, translation, printing and revision of the final report took place.

1.16. During the research, the Poverty Research Group organized two meetings involving the members of the research team and representatives of the relevant organizations. Comments and suggestions from these meetings were considered in the final report. In addition, the team discussed with the local governments of Dundgov and Zavkhan aimags about the results and recommendations of the research and their suggestions and comments were also taken into account. Moreover, comments and suggestions made upon the presentation of the progress and results of the project during the seminar hosted by Poverty Research Group where the leading scholars and specialists took part.

Research data

1.17. Based on the research selection criteria for aimags, the following aimags, soums, and herding households were involved:

- 1. Zavkhan, Bayankhongor, Dundgobi and Khuvsgul, the aimags with large diversification in economic-geographical location, frequency of natural disaster, and number of animals lost, were chosen for the research.
- 2. In total, 17 soums were selected from the above aimags (4 soums from Dundgobi, Bayankhongor and Khuvsgul respectively and 5 soums from Zavkhan Aimag).
- 3. In total 353 herding households were involved in the research which is 73-100 herding families from each aimag (185 herding families who included in the restocking projects (beneficiaries) and 178 herding families who were not included in the projects (non beneficiaries))
- 4. Out of 49 beneficiaries and 24 non-beneficiaries researched in Dundgobi, there were 19 households with increased number of animals while 5 of them kept similar numbers of livestock and 22 lost some or all of their livestock.
- 5. Out of 50 beneficiaries and 50 non-beneficiaries surveyed in Khuvsgul, there were 28 households with increased number of animals while 10 of them kept similar numbers of livestock and 12 lost some or all of their livestock.
- 6. Out of 42 beneficiaries and 50 non-beneficiaries researched in Zavkhan, there were 4 households with increased number of animals while 11 of them kept similar numbers of livestock and 27 lost some or all of their livestock.
- 7. Out of 44 beneficiaries and 54 non-beneficiaries researched in Bayankhongor, there were 18 households with increased number of animals while 7 of them kept similar numbers of livestock and 22 lost some or all of their livestock.
- 8. 57 relevant people including officials such as governors of aimags, soums and bagas, their deputies, coordinators of household livelihood improvement related projects, state inspectors of veterinary service and reproduction departments and livestock experts were interviewed.
- 9. Managements and project coordinator of 13 organizations (including 2 government, 2 non-government and 9 international organizations) who are the sponsors of restocking projects were interviewed.

10. Out of the 433 samples of 4 categories, 83,3 percent of them were herding households. Based on the criteria for the selection of aimags for the study, the research was conducted with the below mentioned samples:

Table 1.1

11. In addition to	the samples	s research, offi	cial data fi	rom United	l Nations
Samples	Zavkhan	Bayankhongor	Dundgov	Khuvsgul	Total
Beneficiaries of the	42	44	49	50	185
restocking programmes					
Herding households	50	54	24	50	178
(not part of the restocking programmes)					
restocking programmes)					
Managments of	8	15	19	15	57
aimags, soums and	_	-	_	_	
bagas				-	
Managements of	2	3	2	6	13
organizations that took part in the					
implementation of					
restocking programmes					
Total	102	116	94	121	433
10(a)	102	110	94	121	400

Number of respondent households

Development Programme, Ministry of Finance and Economy, Poverty Research Group and the relevant departments and divisions of Ministry of Food and Agriculture together with materials of past researches conducted by School of Economics and Business, Agricultural University were used in the study.

Content of interview researches and questionnaires

The questions of the questionnaire were different by research sections depending their characteristics and special features.

1.18. Questionnaire contents for samples who are beneficiaries of restocking projects:

- 1. Household status: Number of household members, how many children/ elderly and adults, herding experience (in years), number of years of settlement in the locality,
- Livestock herding conditions: location, conditions of winter and spring 2. shelters, pastureland capacity and accessibility, number of animals before loss during the disasters and number of animals at the time of restocking project, type of animals,
- 3. Reasons for restocking: Reasons for the loss of livestock, how they got involved in the restocking projects, impression before and after restocking intervention,
- 4. Restocking: How you were included in restocking projects, who was the

project sponsor, how many animals received,

- 5. Results of restocking activities: numbers of current livestock, reasons for increase/loss of livestock, whether they have any debt,
- Impression after restocking intervention: how proper and appropriate the 6. restocking intervention was, what would happen if there was not any restocking activity, what is your plan in future,
- Your suggestion on the improvement of herder livelihood: How do you 7. evaluate the current herder lifestyle, how would you compare it with urban lifestyle, what should the government and individuals do in order to build and secure herder livelihoods, what do you think you have to do.

1.19. Questionnaire contents for samples who are not beneficiaries of restocking projects:

- 1. Household status: Number of household members, how many children/ elderly and adults, herding experience (in years), number of years of settlement in the locality,
- 2. Livestock herding conditions: Location, conditions of winter and spring shelters, capacity and accessibility of pastureland, numbers and types of livestock before and after dzud disaster,
- 3. Reasons for restocking: Reasons for the loss of livestock, how they got involved in the restocking projects, impression before and after restocking intervention.
- 4. Your understanding about restocking activities: How you were included in restocking projects, who was the project sponsor, how many animals received,
- 5. Results of restocking activities: numbers of current livestock, reasons for increase/loss of livestock, whether they have any debt,
- Impression after restocking intervention: how proper and appropriate the **6**. restocking intervention was, what would happen if there was not any restocking activity, what is your plan in future,
- 7. Your suggestion on the improvement of herder livelihood: How do you evaluate the current herder lifestyle, how would you compare it with urban lifestyle, what should the government and individuals do in order to build and secure herder livelihoods, what do you think you have to do.

1.20. Contents of the questionnaire for the officials of aimags, soums and bagas

involved in the restocking projects:

- Identification of the interviewee: Position/working status of the interviewee 1. at the time of the project implementation and at present, qualification,
- Understanding about restocking activities: reasons for livestock losses and 2. restocking activities, who was the sponsor of the project, how the project was implemented, what were the criteria for selection of beneficiaries, how fair were the projects, what were the roles of aimag, soum and baga managements in the implementation of the projects,

- 3. Results of restocking activities: How appropriate was the implementation of the restocking activities, what would happen to the herders who lost their livestock if there was not any restocking activity, what would have been proper implementation methodology and what measures should be taken after losses suffered due to the natural disasters.,
- 4. Your opinion regarding the livelihood of the herder families. How do evaluate the present living style of the herder family compared with the urban household lifestyle, what should the state, government or individual do to improve the livelihood of the herder households;

1.21. Contents of questionnaire for the organizations and individuals organized

the restocking activities

- 1. Particulars of the participants in the survey: Works, job titles, professions of those who involved in the restocking activities and their present employment status, where and with how many households the restocking activities were implemented, how did report the results of the work executed and what kind of evaluation and follow-ups were conducted,
- 2. Understanding about the restocking activities: The reason of losing herds and undertaking of restocking activities, implementation methods applied for the restocking, what kind of the criteria was used for the selection of herders to be involved, how fair was the restocking activity, what roles the leaderships of aimag, soum and baga did play for the implementation,
- 3. Outcomes after the restocking: How appropriate was the implementation of the restocking activities, what would happen to the herders who lost their livestock if there was not any restocking activity, what would have been proper implementation methodology and what measures should be taken after losses suffered due to the natural disasters.,
- 4. Your opinion regarding the livelihood of the herder families: How do evaluate the present living style of the herder family compared with the urban household lifestyle, what should the state, government or individuals do to improve the livelihood of the herder households;

CHAPTER TWO: METHODOLOGY

2.1. This chapter includes the order of elaboration made for the research materials, methodology used for information gathering, definition of basic units of the research, criteria applied for the selection aimag, soum, baga and herder families and representative capability of the research work.

Methodology of development of research materials:

2.2. The study was conducted in three essential stages:

- 1. Evidence gathering,
- 2. Analysis of the data,
- 3. Reporting of findings and policy recommendation.
- 2.3. In multi-stage sampling approach, the following techniques were utilized:
 - 1. Literature review,
 - 2. Questionnaire,
 - 3. Interviews, and
 - 4. Participatory methods.

2.4. The following samples were chosen as the essential components of the study that can help examine the effectiveness of restocking programmes and situation of herder livelihoods:

- 1. Herding households who were included in the restocking programmes,
- 2. Herding households that were not involved in the restocking programmes,
- 3. Managements of aimags, soums and bagas involved in the restocking programmes
- 4. Individuals and organizations that are parts of the implementation of restocking programmes.

2.5. Herding households included in the restocking programmes means herders who had originally possessed few livestock and lost it because of insurmountable natural disasters i.e. drought, dzud and other calamities and therefore, received livestock or financial resources to purchase or grant aid or long-term soft loans from government agencies, non-government organizations or international donors. Furthermore, these herding households were divided into the following categories:

- Successful beneficiaries of the programmes herding households whose livestock holdings increased greatly as a result of restocking,
- Households kept a similar number of livestock,
- Households whose livestock holdings weren't increased or no longer have any livestock despite being included in the restocking programme.

2.6. Herding households that were not involved in the restocking programmes or observers are the households who live in the same area with and who herd their livestock in the similar condition to those herders who were included in the restocking programmes but did not participate. In the study of these key target groups, questionnaire and interview methods were used.

2.7. Managements of aimags, soums and bagas involved in the restocking programmes – governors, their deputies, chairmen of People's Representatives' Councils, officials in charge of social and agricultural affairs.

2.8. Individuals and organizations that are parts of the implementation of restocking programmes – financiers, implementing agencies, monitors and auditors of the restocking programmes. In researching the managements of aimags, soums and bagas involved in the restocking programmes and individuals and organizations that are part of the implementation of restocking programmes, interview and questionnaire methods were utilized together with data analyses.

Sampling

2.9. Restocking programmes were an activity that covered numerous herding households from many aimags and soums, it would be impossible to try to involve them all in the study. This is why the method of sampling was used in evidence gathering stage.

Selection of aimags

2.10. Four aimags were selected to be involved in the study out of 13 aimags where the restocking programmes were implemented. In the selection of these aimags, a target sampling method was used based on reports and other data of the past studies. In doing so, the below-mentioned indicators were employed:

- Extent of damage,
- Number of soums, herding households, and animals included in the restocking programmes,
- Difference of natural zones,
- Frequency of drought and dzud disaters,
- Difference of organizations that are part of the implementation of the restocking programmes.

Table 2.1

	Level & extent	Number	of	Main	Natural	Frequen
Aimag	of damage of	Soums	Animal	implementin	zone	cy of
	the disaster	involv	s	g agency		disaster
		ed	provide d			
Dundgobi	High	10	234321	Poverty	Gobi	HIgh
0	(602,5 thousand			Reduction	desert	5
	animals) (21.2 billion			Programme (PRP)		
	tugrugs)			(1101)		
Zavkhan	Medium	8	27030	PRP	Forest -	Low
	(361.8 thousand	11		Newspaper	steppe	
	animals)			Sankei		
	(13,6 billion					
	tugrugs)					
Bayankhon	Low	4	10848	PRP	Gobi -	High
gor	(146,4 thousand	7		Newspaper	steppe	
	animals)			Sankei		
	(5,2 billion)					
	tugrugs)					
Khuvsgul	Low	20	31539	IFAD,	High	Non-
	(51,5 thousand			British	mountai	disaster
	animals)			Partnership	n area	
	(2,6 billion			Programme		
	tugrugs)					

Selection of aimags involved in the restocking programmes

This way, all the possible levels of disaster harm and vegetation/climatic zones were covered in the study. Included sample areas: Dundgobi, the aimag of highest harm from and frequency of disaster in gobi desert area, Bayankhongor, located in gobi desert and steppe area, an aimag of high disaster frequency and year after year loss of livestock holding, Zavkhan, aplace in forest steppe zone suffering from successive drought disasters, and finally, Khuvsgul, an aimag in a high mountain area which is almost never subject to the disasters (except for the dzud in 2000).

Table 2.2

	Indicators		Level	of dam	age in a	aimags	s involv	ed in t	the stu	ıdy
Damage level	Level inc	licator	Dundgo	bi	Zavkł	nan	Bayan ngor	ıkho-	Khu ul	vsg-
	11	2^2	1	2	1	2	1	2	1	2
Low	36.6-225.2	1.7-10.7					146. 4	5.9	51.5	2. 1
Medium	225.2- 413.8	10.7- 19.7			361. 8	14. 9				
High	413.8-602.5	19.7 - 28.6	602.5	28. 6						

Research on damage level

1-Number of lost animals, in thousands

2- Percentage of loss as of the beginning of the year

Taking the number of lost animals as the main indicator and considering the percentage of animal loss as of the beginning of the year, the extent of damage was estimated as high, medium and low and very low.

Selecting the soums to be involved in the study

2.11. Targeted and random selection method were used for the selection research units. For example, the targeted method was used for aimags and soums and random selection method was used for survey among the aimag and soum authorities and specialists worked during the implementation of the project.

2.12. In selecting the soums, the criteria below were followed:

- Ability to represent the other soums not involved in the study,
- Possibility for revealing the characteristics of the programmes,
- Prospect of involving as many types of herding households as possible,
- Ability to cover as many herding households from each type as possible

2.13. In accordance with the above criteria, comparison was made among the soums under the following indicators:

- Number of herding households included in the restocking programmes,
- Amount of resources expended for restocking,

- Amount of resource (finance) for per household,
- Results & effectiveness after the implementation of the restocking programme,
- Special characteristics of the implementation of the restocking programme.

2.14. On the basis of research findings and suggestions of aimag authorities, 17 soums were chosen to be involved in the study: Khuld, Delgerkhangai, Erdenedalai, and Saintsagaan from Dundgobi Aimag; Ider, Yaruu, Erdenekhairkhan, Santmargaz, and Tsetsen-Uul from Zavkhan aimag; Gurvanbulag, Zag, Galuut, and Bayan-Ovoo from Bayankhongor; and Khatgal, Tunel, Ikh-Uul and Burentogtokh from Khuvsgul Aimag.

2.15. An example of selection of the soums (in Dundgobi) is shown in Table 2.3. As shown, Khuld soum was chosen because higher number of households in this soum was provided with livestock by allocating the animals in small numbers while Erdenedalai was selected for having the biggest restocking provision (99 herding households and 96 million tugrugs). Similarly, Saintsagaan was selected for effectiveness of the programme and conversely, Delgerkhangai was involved because of the highest level of loss of livestock provided by the restocking programmes.

Table 2.3

			Bu	Nu	Special
Name of the	Number	Bud	dget for	mber of	characteristics
soum	of	get, in	per	increased	related to restocking
	househol	million	household,	livestock	
	ds	tugrug	in million	(against the	
	involved	0.0	tugrugs	number	
				before the	
				restocking)	
Delgertsogt	35	20.0	0.57	- 22.8	
Deren	20	12.0	0.60	40.8	
Gurvansaikha	50	40.0	0.80	56.6	
n					
Ulziit	33	32.0	0.97	11.0	
Luus	32	24.0	0.75	24.8	
Kuld	79	34.0	0.43	31.1	Involved more
					households in the
					programme by
					allocating fewer
					animals for per
					household
Delgerkhang	49	46.0	0.94	- 3.8	Ineffective results,
ai					number of animals
					decreased
Saikhan-Ovoo	55	40.0	0.73	16.7	
Erdenedalai	99	96.0	0.97	0.2	Biggest restocking
					provision
Saintsagaan	85	66.0	0.78	25.1	Representing
					the average results
					of the programme
Total	537	410.0	0.76*	18.2*	

Selection of soums of Dundgobi

*-avarege

Selection of key target group (herding households)

2.16. According to the suggestions of local authorities and specialists in charge of the restocking programmes in the locality, herding households of the aforementioned three types were selected. Households that are not parts of restocking porgrammes were selected using random sampling method. When gathering the evidence from the selected households, the team was overcoming several difficulties for example, in Santmargaz soum, Zavkhan aimag, it was taking around 120 kms to reach one herding household selected according to the soum management.

Representative capacity

2.17. Representation capacity of the study was measured in proportional method.

Table 2.4

Implementing		Aimag		Soum			
agency	Involved in the programme	Selected in the Study	Percentage covered in the study (%)	Involved in the programme	Selected in the Study	Percentage covered in the study (%)	
Poverty Reduction Programme	5	3	60.0	35	12	34.3	
International Foundation for Agricultural Development	2	1	50.0	35	4	11.4	

Representative capacity of the study

As shown, 60% of the 5 aimags and 34.3% of the 35 soums involved in the Poverty Reduction Programme hosted restocking programme and 11.4% of the 35 soums involved in the IFAD sponsored programme were respectively covered which shows that the representative capacity of the study is quite high. In addition, aimags and soums where different restocking programmes were implemented by President's Foundation for Rural Development, The British Partnership Programme, DFID, The Sankei Newspaper based in Japan and Save the Children of Great Britain.

CHAPTER THREE: REASON OF RESTOCKING

3.1. This chapter studies the present socio-economic situation of the Mongolian herdsmen and aimes to clarify specifics of the animal husbandry, its strength and weakness and primary and secondary reasons to implement the restocking activities. This chapter also estimates the income and expenditure of herder households based on example of Ider and Erdenekhairkhan soums of Zavkhan aimag and determines that the income of a household with 200-300 heads of livestock will have possibility to cover the costs.

Current socio-economic situation of Mongolian herders

3.2. Following the Mongolia's transition to market economy since 1990-ies, state and cooperative properties once belonged to state farms and rural cooperatives were privatized giving birth to private livestock holding households. According to the 2002 national statistical data, out of the 243.234 herding households, there are 175.911 households to whom livestock is the only means of livelihood. More than half of the 389.765 herders in these households are young people aged between 16-35. Traditionally, herders in Mongolia have been living nomadically herding their five major types of livestock suiting to the natural and climatic condition. The countryside of Mongolia where the herding households settle isolated in tens of kilometers distance from each other is the place where infrastructure is least developed. Social and economic condition for a herding household is being transformed following social development. A good example for this is the increasing number of herding households who enjoy modern amenities such as electricity, TV sets, motorcycle, automobiles and tractors. The following table is to highlight the changes taking place in the social and economic condition for herders.

Table 3.1

Amenities possessed by herders:	1999	2000	2001	2002
Electricity	25.7	20.4	24.8	24.1
TV set	30.9	24.6	29.2	29.4
Assets:				
All types of automobiles	12.8	16.6	17.6	18.4
Tractor	3.0	2.8	2.8	2.7
Motorcycles	29.8	31.7	33.9	32.6

Some indicators highlighting the social and living condition of herders (in thousand households)

The table shows that 1.3 percent of herders use electricity while 1.4 percent enjoy TV sets and 1.6 automobiles. It is clear that most part of the herding households is not enjoying even essential consumer needs.

3.3. Advances which took place in education and health sectors during the socialist era of centrally planned economy enabled free provision of general education for

herders' children and medical service for the people in soum centers. Herding families, as a primary unit of agricultural sector and major producer of animal husbandry products, used to play an important role in the economy. But today, the sector is rather subsistence-oriented because most of the herding households own a small number of livestock holding consisting of low productivity local breed animals.

3.4. According to the 2002 statistical data, 88% of the total livestock holding households in the country or 203.8 thousand households have less than 200 animals. Number of households with 10-50 animals is strongly tending to increase while the number of households with more than 50 animals is consistently decreasing.

3.5. According to Prof. A. Bakey, herding households with 200-300 animals lead only subsistence oriented living merely supplying their own needs and it is only when a household possesses more than 300 animals that it will be considered as "running a business" [Final Report of the research project on "Status of Herding Households", 2000-2003, School of Economics and Business, Agricultural University]. To examine this, incomes and expenses of herding households with less than 300 animals were estimated against the number of animals, flock composition, standard average level of production per animal, average market price of animal products, household consumption, and production cost of animal husbandry for per herding household.

Table 3.2

Number of animals	50	100	150	200	300
Total monetary income of animal husbandry, in thousand tugrugs	610.4	666.4	952.4	1263.7	1353.7
Total expenses of a herding household, in thousand tugrugs	1049.4	1105.7	1169.8	1260.4	1329.3
Out of which, expense of animal husbandry production, in thousand tugrugs	112.7	169.0	233.1	323.7	392.6
Profit margin/Loss, in thousand tugrugs	-439.0	-439.3	-217.4	+3.4	+24.4

Estimation of income and expenses of herdng households (Cases of Ider and Erdenkhairkhan soums of Zavkhan Aimag)

As shown, total monetary revenue from animal husbandry can not cover the total consumption needs and production cost when the number of livestock a household possess is less than 150. And when the household has 200-300 animals, it can cover all its expenses but the profit it make is negligible (3.4-24.4 thousand tugrugs) Total annual expense of a herding household of 4-5 members is estimated to be 936.7 thousand tugrugs.

3.6. Our estimation proves the fact that herding households with 200-300 animals barely supply their own needs and they are highly subsistence-oriented. Assuming from this, 69.1% of herding households in Mongolia are poor and unable to provide their own subsistence because they have less than 100 animals. Having settled this, it is clearly understood that the most important way to improve their living is to increase

the number of animals, a key means of their livelihood, in a herding household. However, it is clear that the improvement of animal quality, strengthening of production and improvement of herdmen's education and culture by involving them in capacity-building trainings of the herders would play important roles for improvement of livelihood of the herders.

Characteristics of pastoral animal husbandry: strengths and weaknesses

3.7. Animal husbandry is one of the major agricultural sectors of the economy producing 78.9% of the total agricultural products and supplying 60% of the total raw material for national food processing industry and 70% of food demands [National Statistical Report 2002]. Caused by the country's natural and economic conditions, development of animal husbandry system has been variable. The traditional style of animal husbandy still kept in development period of free market economy relations.

3.8. Pastoralism, developed closely linked with natural and geographic features of the territory, is a traditional heritage passed from generation to generation of Mongolian herders, therefore, it is vital to take this characteristic into consideration in further improvement. Proper use of pastureland is one of the decisive pre-conditions of improvement of productivity and effectiveness of pastoral animal husbandry industry.

3.9. At present, around 90% of the total usable agricultural land is natural pasture and natural hay field. Plants grown in Mongolia's pasturelands are considered to be valuable and low cost feed for their rich content of vitamins and minerals that are critical in accelerating animal growth and improving fruitfulness of its products. Although the average level of plant growth of Mongolian pasturelands is not high, its biological content is equal to hard feed [Basics of Economic and Agricultural Industry Management, Ulaanbaatar, 1977].

3.10. Despite these advantages, it is not rare for animals to be lacking nutrition because of usually sparse and highly fluctuating growth of pasture plants combined with decline of plant nutritiousness in winter and spring.

3.11. Moreover, privatization of around 97% of livestock after the transition to market economy had both positive and negative impacts on development of pastoralism. For example, the fact that range and cropping land and water points still not owned by the herders causes disputes among the herders over the grazing land makind difficult to prepare hays as well as the overusage of the rangeland. In addition, as the herders do not own the rangeland, the grazing lands are left unattended making difficult to improve the rangeland condition and increase the harvest. The above situation is one of negative impacts for the pasture land animal husbandry. The pasture land deterioration study /"Poverity alleviation strategy in Mongolia" report. UNDP UB. 2001/ conducted in 1998 determined that only 1.7% of the total territory is not deteriorated at all.

3.12. In this regard, we do agree with the scholars who conducted the research on pastoral animal husbandry [Report of the project on Lessons Learnt from 1999-2000 dzud. MOH/00/302. Environment Analyses Division, Meteorological Department, Ulaanbaatar, 2000. pp261-264].

3.13. In particular, it is increasingly becoming required to strengthen the advantages and at the same time, minimize the impact of the disadvantages and most importantly, to address the concept of sustainable development of agriculture in a

scientific project management approach.

3.14. Based on the aforementioned project reports and materials of past works on pastoralism, the strengths and weaknesses of pastoralism is summarized as follows:

Table 3.3

Strengths and weaknesses of pastoral animal husbandry

Strengths	Weaknesses
 Highly suitable to Mongolia's geographical features and rigorous natural and climatic condition. Takes small investment and cost because of whole year grazing and simple facility requirement. Uses low cost pastoral hay. Skilled herders traditionally mastered in herding suiting to the characteristics of the areas Needs only simple reproduction care that doesn't take sophisticated activity Herders rely in natural correlation of "people-animals-pasture" Herders are totally free to make their decision as to where to move, how to produce their products, etc. All the active members of a herding household takes part in the production including pre-school age children and retired old people. Produces pure natural products. 	 High risk, totally dependent on natural an delimatic condtion. Difficult to introduce modern production technologies and practices. Definitely needs additonal fodder during the hardstimes of natural calamities which causes far too much higher cost. Possibility to adopt best techniques of the herders and farmers in other parts of the world is limited. Claimed to be of low productivity and largely subsistence-oriented. Herders have to live in severe natural conditions isolated from the "civilization" which is the inherent weakness of nomadic culture. Because of a lack of modern knowledge, usually depend on past experiences in making decisions. Very limited possibility to produce hygienically accepted products that can meet the market demand

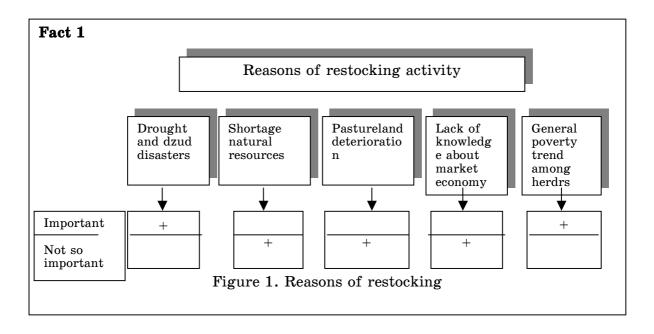
Reasons of restocking activities

3.15. As a result of the privatization campaign in agricultural sector, state and cooperative enterprises running agricultural business were broken down into subsistence-oriented family businesses. Since the activities of these small household businesses were carried out without any pre-determined goals, plans and estimations combined with an almost absence of knowledge and experience to run a business in market economy condition, the poverty level in rural areas has increased dramatically in the years since transition.

3.16. Likewise, systematic privatization of livestock herds of rural cooperatives and state farms to the people without considering the herd compostion and productivity difference, in a way that is not fair in terms of number caused the big gap in wealth. It was especially intense during the early 1990 when the country was experiencing the most shaking part of the "transitional period" and poverty started to become big problem in rural areas following the nationwide economic recess.

3.17. Collapse of the socialist time industries and increased unemployment in urban areas (including soum centers) contributed greatly to the emergence of "new generation of herders" who had to be engaged in animal husbandry as a survival strategy. Partly, it has resulted in increase of herder households up to 198.9 thousand (by 1999) and boosting of livestock number from 25.8 million (1990) to 33.5 million (1999). But after the disasters which befell the country in the past few years, the livestock number has drastically decreased and has fallen to 23.9 (2002) while the proportion of less productive animals has increased enormously in the absence of mating, culling and selection work.

3.18. Although the number of livestock increased after privatization in general, the number of animals for per herding households did not increase that much. Statistical data shows by 2002, 88% of all the herding households possessed less than 200 animals while 65% are households who has less than 100 animals. For these "too small" households who are forming a very "vulnerable group" of society in rural areas, preparing hay and fodder, moving and transportation, receiving veterinary and other necessary services, selling their product in the market, and overcoming natural and product price risks are things that were and remain beyond their capacity.



Drought and dzud disasters

3.19. In recent years, the air temperature has warmed by 1-6 degrees centigrade entailing decreases in rain and eventually, drought. The biggest harm – severe drought has made to the animal husbandry production drying up of smaller rivers and streams causing a lack of water supply for animals and boosting of poisonous insects and

rodents and enormous fires especially in Arkhangai, Khusgul and Zavkhan aimags which has further contributed to the decline of pastoral resources.

3.20. As estimated by researcher G. Biziya, droughts and dzud disasters have occurred 29 times in Mongolia with different level of harm. However these disasters differ from each other in terms of areas covered, number of animals killed, thickness of snowfall and level of coldness, the dzud disasters of 1928, 1944, 1967, and 1976 were the most severe ones. For example, around 9 million animals were killed during the dzud took place in winter of 1944 and spring of 1945 while another dzud which occurred in 1976-1977 had continued for almost 6 months covering 90% of the country's territory. The roster year's dzud of 1993 covered 30 soums of Zavkhan, Bayankhongor and Gobi-Altai aimags and 2.8 million animals were lost and dzud of 1996-1997covered 39 soums of 11 aimags and 1.1 million animals were lost.

Table 3.4

Indicators	1999-2000	2000-2001
Areas covered	13 aimags 157 soums	8 aimags 114 soums
Number of animals killed (in million animals)	3.4	4.8
Cost of animals killed (in billion tugrugs)	91.7	129.4
Aimags that experienced the highest loss (in thousand animals)		
Dundgobi	602.5	557.8
Ovorkhangai	516.4	222.8
Zavkhan	361.8	90.5
Gobi-Altai	36.6	687.2

Damages of the dzud disasters, as of the recent years

3.21. Covering 70% of the total territory, the dzud disaster of 1999-2000 took the lives of 3.4 million animals and left 2.3 thousand herding households with nothing to herd. During 2000-2001 dzud disaster 4.2 million livestock was killed in large animal units.

3.22. Natural and climatic calamities had a serious impact on the livelihoods of many herding households worsening the livings of originally poor or very poor households. 1999-2002 dzud destroyed the livelihoods of 12.000 households killing 11 million animals in territories of 157 soums of 13 aimags.

Poverty of the herders

3.23. Privatization of livestock increased the number of employment opportunities in the sector, however, most of the "employees" are members of poor households unable to provide their subsistence with their small number of animals. These poor households can not play significant role in supplying of the increasing demand of food demand of the people and raw material needs of the national industries. Increased frequency of natural calamities is also increasing the number of herders without any means of livelihood who are the parts of unemployed and underprivileged group in rural areas.

Scarcity of natural resources

3.24. In addition to the damages of dzud disaster, lack of pasture plant and water resources, deterioration of pasturelands nearby urban areas caused by desiccation, one of the tendencies of global climate change, are also largely contributing to the decrease of animal number leading more poverty in rural areas.

3.25. It is estimated that almost half of the 127 million hectares of pastureland areas in the country is under used or not used at all because of shortage of water resources. Furthermore, 5.1 million hectares of pastureland has been burned, 2.0 million hectares crowded by rodents and 6000 hectares destroyed by grasshoppers, just to mention the principal ones.

3.26. Pastureland is a national resource and wealth from which the economy benefits both directly and indirectly. Number of livestock has increased by almost 50% during the last 70 years but in the same period, the pastureland has decreased by around 20%. In 1984, pastureland resource for per livestock was 2.4 hectares and it has decreased down to 1.5 hectares nowadays. Findings of the data based geographical research conducted recently suggests that 78.3 percent of the total pastureland resources of Mongolia is in intense and/or medium deteriorated condition. It is estimated that the plant growth of the intensely deteriorated pastureland (21% of the total pastureland of the country) has decreased by 5 times during the past 40 years and at the same time, number of plant species has declined by 6 times.

3.27. It is believed that the pastureland of our country has a capacity of 62.5 animals grazed in sheep units and the scholars consider over grazing as the main reason of pasture shortage. Pastures near urban areas are overgrazed while pastures in remote areas are "undergrazed".

Fact 2

The legal provision of "openness of pastureland which is public property" allowing everyone use it for free had caused the overuse and deterioration of better pastures.

Lack of understanding of market

3.28. Privatization of livestock in the absence of agricultural products sales and marketing system that could substitute the socialist era service and supply infrastructure had made the newly emergent household businesses with no experience of running business in free market environment bear all the risks of production, price, sales and finance by themselves.

The lack of experience to run enterprise and business activities among the most our herders in the new free market economy environment were a key factor to deteriorate the livelihood of the herder households. 3.29. For the development of agriculture production, the development of nonproduction sector is very important besides of the basic production field. Although the veterinary service and breeding sector, which are very important for the production infrastructure, were privatized in 1997 after the livestock privatization, because of poor service offered by these sectors many animals were lost. Thus, the development of veterinary services, breeding units, transportation, communication and other service sectors is still a very critical issue even today.

3.30. On the other hand, adapting to the new condition of free market didn't happen overnight: wasting the livestock and other assets received through privatization was not few among the fresh property owners – livestock holding households lacking the knowledge of running a farm and selling their products which also added to the rural poverty and unemployment.

3.31. The herders who had lost large number of livestock heads, with no money to buy new animals or collaterals to obtain bank loan, had no choice to ask the state for assistance by carrying out restocking activities in order to improve the livelihoods constituted the main reason of the restocking program.

3.32. In order to define the reason of restocking activity, research was conducted among aimag and soum authorities and herders.

Table 3.5

Reasons of restocking activities

a. Officials

Reasons	Number	Percentage
Great loss of animals because of drought and dzud disasters	33	37.1
Suffered from sudden natural calamities	9	10.1
Spreading of animal diseases	0	0.0
Number of households with few or no livestock increased	19	21.3
It became required to reduce the unemployment	11	12.4
An expression of government policy to support herders	17	19.1
Total	89	100.0

Results of questionnaire research from officials of local authorities show that most of them think that the great loss of animals during the disasters is the main reason of restocking activity (37.1%). 21.3% of them said restocking programmes were implemented because number of households with few or no livestock holdings has increased while the others (19.1%) believe that this is because the government is supporting the herders.

Reason of restocking activity (proportional)	Out of the h	Households who were not		
	Households who increased their livestock	Househol ds who experienc ed or increase neither decrease	Households who decreased or ran out of livestock	included in the restocking programme s
Lost their animals during drought and dzud disasters	37.2	37.7	28.6	37.9
Originally had fewer animals	36.7	37.7	79.2	9.2
Considered to be very poor	23.8	20.8	49.1	24.6

b. Herders

Most of the herders surveyed (28.6-37.7) chose "lost their animals during drought and dzud disasters" and "Originally had fewer animals" (36.7-79.2) as the main reason while a smaller percent of them said the households included in the programmes were "considered to be very poor" (20.8-49.1). Households who were not included in the restocking programmes consider the main reason to be loss of livestock during the disasters and increase of poor households. Households who actually received animals through restocking programmes but unfortunately decreased or lost them said the main reason was "originally had fewer animals" (79.2%) or "considered to be very poor" (49.1%).

3.33. In whole, they think that because of increase of households with few or no livestock has increased due to natural disasters and the government has organized these restocking programmes because it supports the herders.

CHAPTER FOUR: RESTOCKING PROCESS

4.1. This chapter studies the organizations coordinated the restocking activities, their implementation tactics of the restocking program, criteria used for the selection of the herder households and methodologies applied for the restocking and summarizes the information regarding the aimags, soums bagas involved in the program and implementation process in the research targeted aimags. In addition, the criteria used for the selection of herder households and the roles played by the aimag, soum and baga authorities for the implementation of the restocking program were identified based on survey conducted among the herder families and government officials involved in the program.

Number of aimags, soums and households involved in the restocking programmes

and number of animals provided

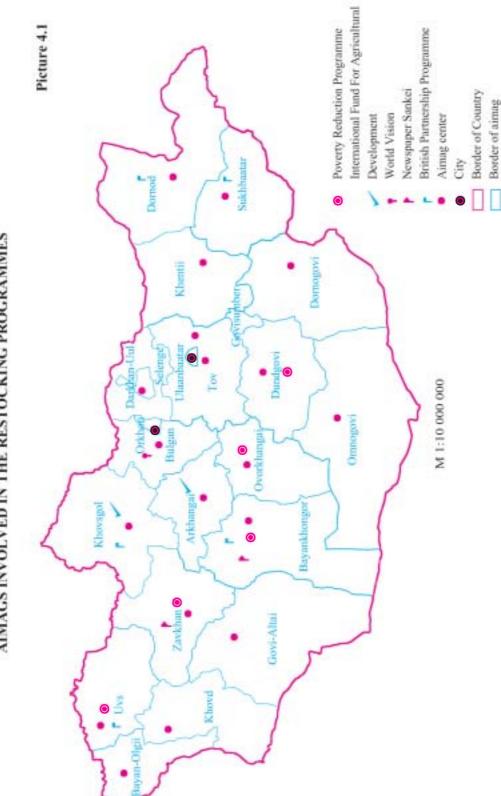
4.2. Restocking is an activity to provide assets to herding households who lost their livestock and other assets on loan or mortgage basis so as to help them overcome the difficulty facing their incomes and livelihoods. Restocking is not a new practice in Mongolia. Historically, it is known that wealthy with people and lamasery (monks) livestock holders with huge number of animals lease animals to hardworking people with good herding skills and restock them in a way of giving them the certain part of the herd they increased. In modern days, restocking programmes started to be implemented with the financing of international donors since 1990 considering the tendency of poverty to increase in rural areas of Mongolia since its transition to market economy. The first restocking programme to be implemented in Mongolia started in Arkhangai Aimag since 1996 and today, 4567 herding households from 114 soums of 17 aimags have been involved in these types of programmes.

Table 4.1

	Aimag	Year of implem en- tation	Soums involved	Household s involved	Number of animals provided	Total budget (in million tugrugs)
Poverty	Dundgobi	2000	10	537	23432	442,21*
Reduction Programme	Ovorkhangai	2000	8	377	17914	333.20*
	Bayankhongor	2000	4	172	10848	106.08*
	Zavkhan	2000	8	378	27030	254.80*
	Uvs	2000	5	198	15826	158.71*
	Total		35	1662	95050	1295.00*
IFAD	Khuvsgul	2000	11	442	13539	233.7
		2001	20	506	18000	337.0
	Arkahangai	2000	15	916	22780	493.8
		2001	3	213	6595	149.4
	Total	35	2077	60914	1213.9	
World Vision	Bulgan	2000	6	70	1995	64.2
		2001	6	50	1500	55.0
	Total	6	120	3495	119.2	
Newspaper	Zavkhan	2000	11	188	11855	145.0
Sankei	Bayankhongor	2000	7	134	9427	117.3
	Total	1	18	322	21282	262.3
British Partnership Programme	Bayankhongor, Dornod, Bayan- Ulgii, Khuvsgul, Uvs, Sukhbaatar	1997	20	473	11225	119.0
President's Foundation for Rural Development	Zavkhan	2000	1	10	724	10.0
0	Frand total		115	4664	192690	1724.4
						1295.0*

Locaions restocking programmes and numbers of aimags, soums and herding households involved

 $\ensuremath{^{\ast}\text{-}}\xspace$ in thousand US dollars



AIMAGS INVOLVED IN THE RESTOCKING PROGRAMMES

Picture 4.2	Name of aimags and sums involved in the study	Sum	Tsetsen-Uul, Sant margad, Yruu, Ider, Erdenekhairkhan	Gurvanbulag, Zag, Galuut, ¹ Bayan-Ovoo	Khatgal, Tunel, Ikh-Uul, Burentogtokh	Khuld, Delgerkhangai, Erdenedalai, Saintsagaan
Pictu	ne of aimags a	Aimag	Zavkhan	Bayankhongor	Khovsgol	Dundgobi
	Nar	Ň		7	က	4
Hereard International Internat	S MORENTA S	Omnogovi		City Border of Country Aimage did not involved in the study M 1+10 000 000		



Restocking process in the aimags involved in the study

4.3. Restocking programmes were implemented by IFAD (in Khuvsgul) and the Poverty Reduction Programme (in Zavkhan, Bayankhongor, and Dundgobi) in the aimags involved in the study. Depending on the diversification of the implementing agencies and working techniques of their employees and connected with the natural and climatic condition of the areas, the programmes implemented were different by aimags.

Overview of the restocking programme implemented in Dundgobi Aimag

4.4. Loss of a great number of livestock in the 1999-2000 dzud disaster which left many herding households with few or no livestock was the main reason why it was decided to implement a restocking programme in this aimag. With a soft loan from Word Bank, the aimag spent 410 million tugrugs in 2000 to restock 537 herding households from 10 soums. Under this programme, 25268 animals were provided to 527 households or 2588 people on 5 year loan basis.

Table 4.2

	House-	Number of	Types of Animals						
Soum	holds	members	All	Camels	Horses	Cattle	Sheep	Goats	
Delgertsogt	35	172	1329		3	9	858	459	
Deren	20	105	878		7	31	580	260	
Gurvansaikhan	50	247	2531	1	46	7	1575	902	
Ulziit	33	173	1710				874	836	
Luus	32	178	1330		10		787	533	
Khuld	79	363	2046		6		892	1148	
Delgerkhangai	49	222	2602		12		1414	1176	
Saikhan-Ovoo	55	227	2415		6		1305	1104	
Erdenedalai	99	494	6245		84	94	4003	2064	
Saintsagaan	85	407	4182		19	20	2787	1356	
Total	537	2588	25268	1	193	161	15075	9838	

Herding households included in the Dundgobi programme

4.5. The livestock provided under the restocking programme consisted of male animals (7.6%), fertile animals (84.3%), and offspring (8.1%).

4.6. Beneficiaries of the World Bank financed restocking programme comprised of households with no livestock (4.3%), households with less than 10 livestock (9.3%), households who have 11-55 livestock (55.5%), households with 51-100 livestock (22.7%), and ones with more than 100 animals (8.2).

Table 4.3

		Out of which	ch (by diffe	erence of an	imal number	·s)
Soum	Total	With no	Up to 10	11-50	51-100	With
		livestock	animals	animals	animals	animals
						more than
						100
Delgertsogt	100	2.9	20.0	71.4	5.7	
Deren	100	15.0	5.0	60.0	15.0	5.0
Gurvansaikhan	100			56.0	44.0	
Ulziit	100	9.0	6.1	78.8	6.1	
Luus	100	3.1	3.1	81.3	12.5	
Khuld	100	1.3	2.5	35.4	48.1	12.7
Delgerkhangai	100		18.4	71.4	10.2	
Saikhan-Ovoo	100	7.3	9.1	72.7	10.9	
Erdenedalai	100	3.0	5.0	20.3	38.4	33.3
Saintsagaan	100	8.2	2.1	66.3	23.4	
Total	100	4.9	7.1	61.3	21.4	5.1

Number of livestock of households before the provision of livestock under the restocking programme, by household composition

4.7. It is shown that most of the soums tried to involve households with few or no livestock, but in Khuld, Erdenedalai and Gurvansaikhan soums, households with a substantial number received still more animals.

4.8. Restocking was carried out in Dundgobi Aimag by the Household Livelihood Supporting Project. During the implementation term, temporary employees were hired and now, monitoring is entrusted to officials of the soum authorities as a subsidiary assignment. Implementation was carried out in accordance with guidance and methodology developed by the hosting agency. The Aimag's Committee of Poverty Reduction (former) participated with a role to establish the price of animals to be purchased and conduct training sessions on national restocking programme. During the implementation term, no case of fraud or other problem related were encountered. But some mistakes and delays were made in preparing and delivering the reports of the restocking activity and information on the progress.

4.9. Besides these programme efforts, some different types of restocking activities were in evidence. Mr. Sampil, a herder who has more than 1000 animals, gave a certain number of livestock to three households who were his relatives led by Mr. Sampil for three years, these households increased the number of their livestock. Mr. Tomorchuluun, a herder, who possess more than 1000 livestock, restocked several households who are also his relatives with cheaper priced animals and by loan as well. In some soums, the soum managements issued finance to restock some number of herding households. In Erdenedalai Soum, it was reported that the soum management restocked some households but they were not able to increase it.

4.10. Despite the large number of requests to be included in the restocking programme, only a small percentage of the herding households were involved in the programme. For instance, in Saintsagaan soum there were 200 households who applied for the programme out of whom only 85 were selected. For the recent years, livelihoods of the most of the herding households deteriorated and they don't have enough livestock for their subsistence. This is why herders and local authorities strongly requested

further restocking opportunities. Although potentially the results of the previous programmes were unsatisfactory, but there is no other feasible way to improve livelihoods. This situation necessitates the enhancement of strategies and methods of restocking programmes.

Overview of restockig programmes in Zavkhan Aimag

4.11. Loss of a great number of livestock in the 1999-2000 dzud disaster which left many herding households with few or no livestock is the reason why it was decided to implement a restocking programme in this aimag. The following organizations implemented programmes to help restock the herding households who suffered from severe disasters which took most it not, all of their livestock.

Table 4.4

	Financiers	Budget In million tugrugs	Number of soums involved	Year of programme inception	Duration of the programme
1	World Bank	313.8	8	2000	5
2	Sankei Foundation (Japan)	120.9	11	2000	5
3	President's Foundation	10.7	1	2001	2

Sponsors of restocking programmes

4.12. Through the World Bank loan, 313.8 million tugrugs were expended to restock 380 herding households from 8 soums who had suffered from the dzud disaster in 2000. Under this activity, 27123 animals were provided on a 5 year loan basis. And in the same year, with the financing of Sankei Foundation of Japan, 120.9 million tugrugs were provided to 180 households from 11 soums on loan basis. Furthermore, 11 households in Yaruu Soum received 10.7 million tugrugs form President's Foundation on a restocking purpose.

4.13. In total, 571 households from 20 soums of Zavkhan Aimag were involved in both internationally and domestically financed restocking programmes. They received financial resource to purchase 39702 animals on loan basis and these activities costed 445.7 million tugrugs.

4.14. World Bank financed restocking programme were supposed to be implemented under a criterion that dictates financially capable (able to pay back the loan) households with less than 10 animals who possess adequate skills of herding as well as winter and spring settlement which was violated in some respect. For instance, 11% of the beneficiaries didn't possess winter shelter, 15% with no spring settlement and in some soums, fraudulent practices were evident, i.e. when selecting the households to be included in the restocking programme, some people deliberately formed the most part of the members of the Baga Meeting by using their relatives to have decisions fraudulent to their interests approved including the direct attraction of animals.

Table 4.5

			Г	ypes of an	imals		Budget
Soum	Households	Total	Horse	Cattle	Sheep	Goat	In million
							tugrugs
			Vorld Ban	k Loan			
Aldarkhaan	34	2669	13	16	1211	1429	31.03
Santmargaz	70	3668	6		2410	1252	42.20
Songoni	33	2777	2	1	2634	140	32.73
Uliastai	57	2229	17	24	1810	378	31.65
Shiluustei	26	1563	1	3	1539	20	17.70
Erdenekhairkhan	69	6246	11	15	4877	1343	67.80
Yaruu	50	4402	24	30	3903	445	49.88
Tsetsen-Uul	41	3569			2661	908	40.81
Total	380	27123	74	89	21045	5915	313.83
		Two: S	Sankei Fo	undation l	oan		
Tsagaanchuluut	10	800			800		7.97
Zavkhanmandal	10	800			800		7.97
Ider	10	800			800		7.97
Tosontsengel	10	800			800		7.97
Tsagaankhairkha	10	800			800		7.97
n							
Shiluustei	15	1200			1200		11.96
Ikh-Uul	10	730			730		7.96
Otgon	15	810			810		11.96
Bayan-	10	802	4	4	691	103	6.17
Khairkhan							
Nomrog	10	820			820		7.97
Uliastai	70	3493			3448	45	34.57
Total	180	11855	4	4	11699	148	120.4
		Three:	Presiden	t's Founda	tion		
Yaruu	11	724	10	10	482	222	11.0
Grand total	571	39702	88	103	33226	6285	445.2

Herding households included in the programmes

4.15. As shown, selections of households were carried out differently: in Ider, Yaruu and Erdenekhairkhan soums, households with few or no livestock were included while in Santmargaz and Tsetsen-Uul, households with comparatively higher number of animals were chosen as beneficiaries.

Table 4.6

Change of number of animals in per household, by soum average

	Soum		Budg		
		Before 2000	Number received through restocking	After 2000	et, in thousand tugrugs
1	Santmargaz	113	55	104	639.3
2	Yaruu	18	86	33	1000.0
3	Erdenekhairkhan	33	90	75	1007.8
4	Tsetsen-Uul	120	86	51	930.8
5	Ider	37	80	37	1000.0

4.16. For example, a household who had 466 animals was included in the programme in Santmargaz, and there were quite a number of households with more than 200 animals in Tsetsen-Uul soum who received animals from the programme. In most of the soums, approximately 80-90 animals were provided to the households but in Santmargaz where they decided to cover more people and provided around 55 animals. That's why beneficiaries in this soum have a comparatively lower level of debt, around 639.3 thousand tugrugs.

4.17. The Household Livelihood supporting Project also implemented a restocking programme in Zavkhan Aimag. During the implementation of this activity, a team of temporary employees headed by the soum governor operated. But the duties of restocking programme are assigned to soum agricultural specialist. Restocking activities were carried out in accordance with the guidelines and procedures developed by the sponsoring agency.

4.18. After the implementation of the restocking programme, the number of livestock in the aimag has decreased by 1.6-4 times in soum average. Heavy snowfall in most of the soums of Zavkhan aimag in 2000 killed all the weak animals gathered from different places under the restocking programme ruining the results of restocking efforts. Herders say that however the activity was something that is vitally important but done at the wrong time. Specially, because they started the restocking in Tsetsen-Uul after the snowfall in December, the animals were starting to die on the way to the household.

4.19. Households who lost most or all of their livestock after the restocking programmes moved to soum and aimag centers and some of them even migrated to Ulaanbaatar and other towns without the necessary permissions and registration fees as a survival strategy.

Table 4.7

	Soum	Households	Destination of migrants:			
		left with no livestock	Ulaanbaatar	Uliastai	Soum center	Other
1	Santmargaz	12	4	1	5	1
2	Yaruu	19	5	16	3	2
3	Erdenekhairkhan	6	5	24	4	4
4	Tsetsen-Uul	4	1	4	5	1
5	Ider	2			7	
	Total	43	15	45	24	8

Migration of households left with few or no livestock

As shown, in total there were 43 households who lost all their animals and terminated the programme in the aforementioned 5 soums. 16.1% of all the herding households (92 households) included in the programme migrated to different places.

4.20. Aside from the programme restocking activities, a cooperative called "Dorvoljin Tavan Erdene" under (former) Cooperatives Union of Zavkhan Aimag restocked 60 households with no livestock. Moreover, another cooperative called "Zavkhan-Osokh Ireedui" has established a foundation for protecting the health of livestock using the finance of its members and is planning to organize a restocking programme.

Outline of restocking programmes in Bayankhongor Aimag

4.21. Restocking programmes in Bayankhongor were implemented between June 1998 and August 2000. Bayankhongor is an aimag of 20 soums located in high mountain,

forest steppe, steppe and gobi desert region. Restocking programmes in this aimag was financed by four organizations:

- 1. World Bank,
- 2. Save the Children of Great Britain,
- 3. Sankei Foundation of Japan,
- 4. Maliin Buyan Project of Bayankhongor Aimag.

4.22. 319.9 million tugrugs were spent to restock 441 households from 20 soums of this aimag (Table 4.8). Under theses programmes, 27,698 animals were provided to these households of 1,665 members on 6 year loan basis.

Table 4.8

Types of animals Budget Soum Total Cattle Goats House Horse Sheep In million holds tugrugs **One: World Bank loan** 360 Gurvanbulag 48 3312295233.1Jargalant 1211951195 11.4201 Bayanbulag $\mathbf{54}$ 2569236825.858 3772351 Zag 3421 37.6Total 17210848 9936 912 107.9 **Two: Sankei Foundation** Galuut 10 765 179 10.0 25561Gurvanbulag 29 2000 155184520.0Jargalant 20 1938 1698 240 20.0 Khureemaral 11 724482 207 10.0 Bayanbulag 18 1000 $\mathbf{24}$ 11 1000 10.0 **40** 2000 1950 50 20.0 Zag Bayanlig 11 1000 183 817 10.0 Total 139 9427 24 36 7719 1648 100.0 **Three: Save the Children** Gurvanbulag 10 300 300 3.0 Khureemaral 10 300 300 3.0Bayanbulag 10 300 300 3.0Zag 10 300 300 3.0 Total **1200 40** 120012.0Four: Maliin Byan Foundation 1023 Galuut 14440 14.0 133553540515716.0 Erdenetsogt 164 16579523 Gurvanbulag 1 4 $\mathbf{45}$ 1.0 2 200200 3.2Jargalant 2118 18 Bayan-Ovoo 1689 1534119 21.010 396 Ulziit 760 1 3532811.0 Bombogor 2 91 5536 2.0 2 Khureemaral 200 100 100 2.02 2 Bayanbulag 98 6 65 252.0Zag $\mathbf{2}$ 128 $\mathbf{5}$ 10 90 $\mathbf{23}$ 2.0 Jinst 4 352 20 120 2124.0 Bayanbobi 1 117 $\mathbf{5}$ 1597 2.0 Shinejinst 2 2642 2 260 2.0 Bayan-Ondor 7 100 50 502.0 Bayantsagaan $\mathbf{2}$ 224 $\mathbf{2}$ 41 181 4.0 Baatsagaan 9 283 81 202 2.28 Buutsagaan $\mathbf{5}$ 22812793 9.0 73 277 Total 102 6214 3551 2313 100.0 **Grand** Total 453 27689 97 313 22406 4873 319.9

Herding households included in the programmes in Bayankhongor Aimag

4.23. A special characteristic of the restocking programmes in Bayankhongor is that most of them were implemented in northern soums of this aimag because for the first two years of implementation, weather conditions were quite favorable in southern soums in gobi desert area. Therefore, we chose these areas - Gurvanbulag, Zag, Galuut, and Bayan-Ovoo soums for our study.

4.24. Around 65-70 animals were provided to households on average, which didn't make a significant change in their livestock numbers because animals were provided to households with a certain number of livestock. Nowadays, most of the beneficiaries have increased number of livestock and many of them are giving first 25 of the animals they received back to the programme hosting organization. It is worth highlighting that recording and bookkeeping was especially well kept in Gurvanbulag and Zag soums. For example, they visit the beneficiaries twice a year to examine the effectiveness of the programme. Keeping of a book to record the results became an effective controlling mechanism. Galuut soum has the fewest number of herding households involved in the programme. There were only 14 households that were restocked by Maliin Buyan Foundation.

Table 4.9

	Total	Number of animals in per household	Composition of herds, proportionally
Number of animals before restocking	2968	67	
Camel	45	1	1.4
Horse	494	11	16.4
Cattle	470	11	16.4
Sheep	1200	27	40.2
Goat	759	17	25.6
Number of animals received through restocking programme	2781	63	
Sheep	2494	56	89.9
Goat	287	7	10.1
Number of animals as of today	4488	102	
Camel	9		
Horse	444	11	10.7
Cattle	420	9	8.8
Sheep	2230	51	50.0
Goat	1385	31	30.5

Number of households involved in the restocking programmes

4.25. As indicated, number of animals of per household increased by 52.2% and there wasn't any significant change in the herd composition.

Overview of restocking programmes in Khuvsgul Aimag

4.26. Since 1999, IFAD started to implement a restocking programme for poor households and provided 1.080.537.9 tugrugs of livestock to 1.777 households from 13 soums. All of these animals were provided on 9 year loan basis with a requirement to start the repayments from the 6^{th} year for large animals and the 3^{rd} year for small animals. In addition, British Partnership Programme provided 2,229 livestock of 1,925 thousand tugrug to 129 households in Khatgal and Chandmani-Ondor soums. 37.19% of households involved in IFAD sponsored programme had 20-30 livestock while 34.3% of them had 10-20 livestock, 21.5% with more than 30 animals and the remaining households had less than 10 animals.

Table 4.10

		Out of which (Animals provided)					
Year	Number of households included	0-5	5-10	10-20	20-30	More than 30	
1999	78	1	8	49	15	5	
2000	364	24	36	132	103	69	
2001	578	9	21	210	121	147	
2002	757	2	22	219	352	162	
Total	1777	36	87	610	591	383	

Number of animals (by group) provided to beneficiaries

4.27. As shown, most of the soums include households that had more than 10 animals and guarantee pay back of the loan.

4.28. The methods of implementation and criteria for selecting the households of the British Partnership Programme restocked the households in Khatgal and Chandmani-Ondor soums were similar to the previously mentioned programme. During the implementation, a special team was assigned in the aimag and soums. The current implementation team of the programme is responsible for continuing the implementation of the programme in the entire aimag, controlling the process and taking corrective measures, conducting training sessions, vaccinating the animals provided by the programme, managing the restocking process in different soums, dealing with the payment of the loans, and allocating the financial resources to the soums.

4.29. The programme was carried out under the guidance and procedure developed by aimag management and the implementing agency. No breach or infringement occurred. But there were cases of delayed of the submission the reports and relevant information.

4.30. Besides these two programmes, Mr. B. Gundalai, Member of the Parliament, carried out another restocking project where the beneficiaries were chosen on lottery basis. We couldn't gather any information about this project because we were not able to find the people in charge.

4.31. Although there were many households who requested to be involved in the restocking programme, only a small percent of them were actually included. Generally speaking, restocking in Khuvsgul was carried out in a highly organized and controlled way. A record of performance was kept in a book kept by the implementing team in which they record the performance of the contract on a quarterly basis by visiting the beneficiaries to do the auditing.

4.32. In order to enhance the effectiveness of the restocking programme, the research team organized several pieces of works such as involving the local authorities, relevant specialists in the aimag, other relevant people who took part in the implementation of the programme and the herders who received animals through the

programme in training sessions, free vaccination of animals provided by the programme, and getting the livestock insured with the budget of restcoking.

4.33. To ensure that the beneficiaries received the animals from the programme insured, the team assisted them in furnishing the paperwork and they also organized training seminars to promote the usefulness and importance of insurance.

4.34. The following table gives detailed information about training sessions held by restocking programme implementation team.

Table 4.11

Year	Number of sessions	Number of people involved	Number of place where the sessions were held (double
			counting permitted)
1999	14	920	16
2000	58	2680	58
2001	28	1420	28
2002	44	2339	44
Total	144	7359	146

Training sessions

4.35. Results of the restocking in Khuvsgul were significantly dependent on the weather condition of the year in which the programme was implemented. For example in 1999 and 2000, number of livestock of the households who are included in the programme was reduced to a large extent because of harsh weather conditions. But in 2001, 2002, most of the beneficiaries' livestock holding were increased. Management of the implementation team and other relevant people claim that the effectiveness of the programme was reduced because the selection of the beneficiaries was carried out inappropriately. Thanks to the actions taken towards enhancing the effectiveness of the programme and the efforts paid by the beneficiaries themselves, number of households who had consistently increased or kept an adequate number of livestock has grown continuously while the number of "problematic" cases were minimized as shown below.

Table 4.12

Number of beneficiaries who are						
	Consistently		Maintaining	Lost a	Problemat	
Year	Total	increasing their	an adequate level	negligible	ic cases*	
		animals	of increase	number of		
				animals		
1999	78	49	12	8	9	
2000	364	249	32	26	57	
2001	578	488	60	21	9	
2002	757	222	511	22	2	
Total	1777	1008	615	77	77	

Examination of effectiveness of the restocking programme in Khuvsgul Aimag

*- Household- raising serious concerns that lost significant number of livestock heads and became not reliable to repay the loan due to small number of animals left.

4.36. The table shows that the number of "problematic" households were 57 in 2000 because many households lost significant number of animals during the dzud disaster taken place in that year. Generally, the income of the beneficiaries increased as a result of the programme implemented in Khuvsgul Aimag as can be seen in the grouping of the income of beneficiaries.

Table 4.13

Year	Number of	More than 14.700		5.580-	$5.580 \cdot 14.700$		Up to 5.580	
	households	Before	By the	Before the	By the end	Before the	By the end	
		the	end of	programm	of 2002	programm	of 2002	
		program	2002	е		е		
		me						
1999	78	1	15	20	50	51	13	
2000	364	27	74	130	212	207	78	
2001	578	54	91	268	378	256	109	
2002	757	10	12	1257	321	490	424	
Total	1777	92	192	1675	961	1004	624	

Income grouping of beneficiaries.

4.37. As indicated, income level of beneficiaries increased by the end of the year and the number higher income households has been increasing year by year. It can be concluded that the restocking programme was a great contribution towards improving household livelihoods. From the results of the interviews with high officials of aimags and soums, specialists, representatives of the implementing team and relevant individuals, the restocking programme has become an important contribution to the building and securing of the incomes and livelihoods of herder households in the aimag of Khuvsgul. But at the same time, it needs to be stressed that there is a necessity to improve the implementation methods, strategies and procedures of the restocking programme. What also needs to be addressed is the question of How to improve the livelihoods of very poor households?

4.38. In selecting the soums for the study, the same criterion was used as in the other aimags but here, we were also concerned about how many programmes were implemented in the soum.

Table 4.14

					Implementing agency
	Number of	Budget of the	Financial	Number of	
Soum	households	programme, ₹	resource	animals	
	involved in		allocated for	allocated	
	the		per household,	for per	
	programmme		₩	household	
Burentogtokh	111	76555.5	689.69	47.5	IFAD
Khatgal	42	23337.0	555.64	20.2	IFAD
	27	5909.0	218.85	24.25	British Partnership
					Programme
Ikh-Uul	82	52782.0	643.4	47.3	IFAD
Tunel	94	58500.0	590.42	24.8	IFAD

Selection of soums to be involved in the study

After discussing with the programme implementation team and aimag authority, the aforementioned soums were selected for different reasons: Ikh-Uul for its high effectiveness of the programme, Tunel for its unsatisfactory results, Burentogtokh because it has the average effectiveness and finally, Khatgal, because it has received two programmes.

4.39. Bagas were selected for the study after considering the suggestions of local authorities, local representative of the restocking programme and other relevant people. But as for selection of the samples (beneficiaries of the programme and households that were not involved in the programme), this was done using a random sampling method.

Sponsors of the restocking programmes

4.40. As mentioned above, the following organizations organized the restocking activities in order to build and secure the incomes and livelihoods of herder households:

- Poverty Reduction Programme supported by World Bank
- International Foundation for Agricultural Development
- Sankei Newspaper based in Japan
- British Partnership Programme
- President's Foundation for Rural Development
- World Vision

4.41. Besides these national and international organizations, local governments of some aimags and soums, companies and cooperatives and individuals made their valuable contribution to the restocking activities.

Poverty Reduction Programme (PRP)

4.42. Since 1997, PRP started to implement restocking projects for poor herder households in 16 soums of Bayankhongor, Dornod, Bayan-Ulgii and Sukhbaatar aimags and restocked 366 poor herder households. Its restocking activity is to provide 150,000 – 300,000 tugrugs of livestock holding consisting of healthy and reproductive animals of good breed to per beneficiary on a three year loan basis where the household is obliged to pay back the loan in animal units.

4.43. In order to relieve the loss of 1999-2000 dzud disaster, 5 programmes of herd restocking for the herder households in the five aimags who lost most or all of their livestock holdings were approved to be implemented by the 28 April 2000 by decree of Mr. Amarjargal, former Prime Minister and Chairman of the National Committee of Poverty Reduction. According to this decree, the budget of the restocking programme was allocated as follows:

Table 4.15

Budget allocation for the programme of restocking the herder households who lost most or all of their livestock holdings

	Aimag Number of animals lost		Proportion of lost	Loan granted (in
		(in thousand heads) ¹	animals in the total	thousand US
			livestock holding	dollars)
1	Dundgobi	557.8	34.15	442.21
2	Ovorkhangai	420.3	25.73	333.20
3	Zavkhan	321.4	19.68	254.80
4	Uvs	200.2	12.26	158.71
5	Bayankhongor	133.8	8.18	106.08
Tot	al	1633.5	100.0	1295.00

¹- As of 17 April, 2000

4.44. In the framework of PRP, 95050 animals were provided to 1662 herder households from 35 soums of 5 aimags on 5-year loan basis and the total budget for this programme was 1,395.5 million tugrugs. The beneficiaries of this programme consisted of 246 households who have no livestock, 686 households with 10-30 animals, 552 households possessing 50-100 animals and 65 of them with more than 100 livestock. 73 of the beneficiaries were female-headed households.

Table 4.16

Number of aimags and soums involved in the PRP restocking programme & number of livestock holdings provided

Aimags	Soums	Households	Total number of animals	Number of animals allocated for per household
Dundgobi	10	537	23432	43
Ovorkhangai	8	377	17914	47
Bayankhongor	4	172	10848	63
Zavkhan	8	378	27030	71
Uvs	5	198	15826	79
Total	35	1728	95050	55

4.45. The average number of animals provided to per household was 45-100 and the amount of repayment was 600 - 1000 thousand tugrugs. The livestock holding consisted of sheep (74,2%), goats (25%) and a small number of large animals (camels, horses etc.) (0.8%).

Table 4.17

	Number and c	Number of animals	
Types of	livesto	ck holding	allocated for per
livestock	Head	Percentages	household, heads
Camel	2	0.0002	0.001
Horse	406	0.42	0.23
Cattle	273	0.28	0.15
Sheep	70527	74.2	40.8
Goat	23842	25.0	13.8
Total	95050	100.0	55

Average number and composition of livestock holding provided through the restocking programme

4.46. Overall, 99.2% of all the livestock holdings provided were made up of small animals out of which 74.2% were sheep. On average, 41 sheep, 13 goats and 1 large animal was allocated to per herder household.

4.47. Collaborating with local people, the Poverty Reduction Committee selected the beneficiaries and provided up to 100 animals (determined by the number of their members) on the basis of a 5 year loan contract with a yearly interest rate of 6 percent. According to the contract provisions, the beneficiary shall start making the payment from the 3^{rd} year and must pay the 30% of the principal loan in the 3^{rd} and 4^{th} years and 40% in the 5^{th} year.

International Foundation for Agricultural Development (IFAD)

4.48. In the framework of the IFAD project on Reduction of Rural Poverty in Khuvsgul and Arkhangai Aimags, 60.914 animals were provided to 2.011 herder households from 49 soums of these two aimags in two years time (36.319 animals to 1.358 households of 26 soums in 2000 and 24.595 animals to 719 households from 23 soums in 2001).

Table 4.18

	Aimag	Year	Number	Number of	Number of	Total budget
		implemention	soums	households	livestock	(in million
			involved	reached	distributed	tugrugs)
IFAD	Khuvsgul	2000	11	442	13539	233.7
		2001	20	506	18000	337.0
	Arkhangai	2000	15	916	22780	493.8
		2001	3	213	6595	149.4

IFAD sponsored herd-restocking project

4.49. A total of 1.213.9 million tugrugs were expended for this project. What you receive through this project is long term loan in livestock type and the condition is to complete the payment of small animal loan in 6 years and that of cattle in 9 years. The project was expanded in 2002 and it now also covers Bulgan and Khentii aimags.

4.50. The project is being implemented under the conditions of IFAD and the government agreement on Indirect Loan.

Sankei Newspaper of Japan

4.51. On the basis of the 31 May 2000 resolution of the government of Mongolia and No. 84 order of Minister of Food and Agriculture issued on 2 June 2000, it was decided to expend the finance of 245.1 million tugrugs by the Sankey Newspaper of Japan for restocking the herder households in Bayankhongor and Zavkhan aimags who lost most or all of their livestock during the severe drought and dzud disasters. The rules governing organizing and controlling the implementation of the programme and ensuring the loans granted to the herder households shall be paid back was entrusted with the State Department of Veterinary Clinic and Reproduction and its local branches.

4.52. Soums to be involved in this programme and the amount of budget allocated to soum was also approved by above-mentioned order. Households were selected by the governor's offices of the soums to be included in the programme and each one of them was allocated with around 80 small animals.

Table 4.19

Aimag	Number of soums	Number of animals	Total budget, in
	involved	distributed	million tugrugs
Zavkhan	10	11855	145.1
Bavankhongor	7	9427	100.0

Restocking with the finance of the Sankei Newspaper

4.53. The Sankei Foundation expended 11.8 thousand livestock or 145.1 million tugrugs for 10 soums of Zavkhan Aimag and 9.4 thousand livestock or 100 million tugrugs for 7 soums of Bayankhongor Aimag and included 322 herder households in the programme. The number of animals allocated to per household in Zavkhan was 65 and 67.8 in Bayankhongor is explained by the policy of reaching more households.

4.54. In each aimag, Restocking Committees were established under the local veterinary clinic and reproduction offices in order to estimate the results of restocking programme on a quarterly and yearly basis and to report to the relevant organizations, and using the interest rate payment of the programme loan, form a working fund in the veterinary clinic and reproduction office. The responsibilities of the Restocking Committee are organizing the restocking activities in the soums involved in the programme, controlling the implementation of the programme, reporting to the relevant agencies and tackling the problems that may occur during the day to day implementation of the programme.

4.55. In selecting the beneficiaries, the soum veterinary clinics and reproduction cooperatives discussed with local authorities and made selection decisions upon their letters of reference and resolutions.

4.56. According to the contract, the beneficiaries shall receive livestock of appropriate herd composition and are obliged to make repayment of 30% of the loan principal in the 3^{rd} year and another 30% in the 4^{th} year and finally, the remaining 40% in the 5^{th} year. At the same time, the beneficiary must start to pay the interest rate payment (6% annually) from the third year.

Fact 3

In Zavkhan Aimag, 11,855 livestock were purchased by Sankei newspaper with the 122.5 million tugrugs from budget of the programme. Of this, 8.7 million tugrugs were expended for the payment of livestock insurance and 8.7 million tugrugs was received as the first year payment of the loan which was used to establish a running fund in the veterinary clinic and reproduction office. On average, 10-15 households were restocked in the soums involved in the programme, but in Uliastai, there were 259 households who applied for the programme. Considering this, an additional 8.7 tugrugs, the equivalent of a yearly interest rate payment of the loans in the other soums, were used in the restocking of this soum and the number of beneficiaries totalled 73 households.

British Partnership Programme

4.57. The restocking project with the finance of British Partnership Programme was started to be implemented on pilot basis in 19 soums of Bayan-Ulgii, Bayankhongor, Dornod, Khuvsgul, Uvs and Sukhbaatar aimags since 1998 involving 473 poor families with few or no livestock. In an 119 million tugrugs were expended for financing this pilot project. The project activity was granting small loans in livestock types to the households of the vulnerable group in order to improve their subsistence. Healthy and reproductive small animals with a cost of 150 to 300 thousand tugrugs were provided

to per beneficiary household. 11.225 livestock were purchased and distributed to the households.

President's Foundation for Rural Development

4.58. In order to restock the poorest herder households with few or no livestock in the Yaruu Soum of Zavkhan Aimag, the birthplace of the president of Mongolia, 11 million tugrug was expended from the foundation and 724 livestock was distributed to 11 herder households.

Other organizations and individuals

4.59. Using the 1.6 million tugrugs donated by a non-government organization in Japan, 3 households in Omnogobi Aimag were restocked.

4.60. Some of members of the national parliament carried out restocking activities in their birthplaces and election districts.

Criteria for selection of beneficiaries

Poverty Reduction Programme

4.61. Restocking activities of the PRP were carried out under with conditions, guidance and methodology. The beneficiaries were selected under the following criteria.

Key indicators:

- Permanent residency of the locality legally registered with the local administration (excluding soum center),
- Being a victim of 1999-2000 natural disaster left with no or less than 10 livestock of large animal units (6 sheep, 8 goats, 1.5 camel, 1 cow, 1 horse),
- Possessing adequate skills of herding; be officially accepted by the people of the baga to be fully able to permanently manage livestock production; and this supported to be included in the programme by baga meeting,
- Have 2 or more members in the household who are capable of herding livestock,
- Have winter and spring settlement facilities,
- Be capable of protecting his/her livestock from natural risks,
- All the members of the household agree the conditions of the contract and payment schedule,
- No outstanding debt from banks or other organizations; is subject to investigation of police or other law enforcement organizations.

Requirement for livestock to be provided under the contract:

- Clinically proven to be healthy and not to have any disease or illness,
- Be of normal productivity level for the breed,
- Breeding males to be provided under the loan must be clinically tested and shall possess a breeding license,
- Breeding females to be provided under the loan shall be young (aged between 2-4 years).

4.62. IFAD

Criteria for selection of beneficiaries:

- Be officially registered as poor through the soum research,
- Be a born herder and have experience and knowledge of herding,
- Have at least 2 members in the household capable of labor,
- Have fences, pastureland and water supply resources sufficient for the use for during the 4 seasons of the year,
- Have a unified duty division in the household and/or in the household group,
- Have no debt from any organization or individual; not a subject to investigation by the police or other law enforcement organization,
- Not be in breach of the social registration requirements,
- Possess 10-25 livestock of large livestock units,
- Capable of protecting his/her livestock from natural calamities,
- Have no incidence of infectious diseases,

• Have increased the number of his/her livestock for the last 3 years.

Requirement for livestock to be provided under the contract:

Selection of animals to be purchased: Breeding cattle and sheep Mongolian cattle:

• 3-4 years old cow with a live weight of 190-230 kilograms, if older than 4 years, be at least 240 kilograms,

• Milk yield – more than 4 liters a day with fat content of 4.2 percent Yak:

- 3-4 years old cow weighing between 170-200 kilograms, if older than 4 years, be at least 210 kilograms,
- Milk yield -3 liters a day with fat content more than 5.8-6.2 percent.

Mongolian sheep

- 5 months old female yearling sheep weighing over 28 kilograms; female sheep aged more than 3 years weighing more than 36 kilograms. Small particle wool with no content of wool intermediate.
- Wool yield yearling sheep 1 kilogram; female sheep not less than 1.2-1.3 kilograms.

Mongolian goat

- 5 months old female goats weighing 22-24 kilograms; adult female goats more than 30 kilograms.
- Cashmere yield of yearling goats shall be 200-210 grams and that of adult female goats must be 260-270 grams during March and April.
- When purchasing, individual inspection and weighing must be taken. After that, breeding should be carried out.

Criteria for selecting poor herder households as beneficiaries

4.63. Since the main objective of the study was to determine the criteria for selecting the beneficiaries for the restocking projects, local authorities of aimags and soums where the projects were implemented as well as a number of herders some of whom were involved in the project along with those who weren't included in it were surveyed.

Table 4.20

Household categories	Number	Percentage
Very poor household with no livestock	16	20.8
Poor household with few livestock	33	42.9
Households who lost most of their animals because of drought ad dzud disasters	28	36.3
Total	77	100.0

Criteria for selecting the beneficiaries, local authorities' view

In an 36.3% of the local authorities said that the households who lost their livestock during the disaster were selected to be included in the restocking programme while 63.7% of them considered being poor with few or no livestock as the main reason to be selected.

Table 4.21

]	Beneficiaries who			
Ways	Increased	Has a	Lost some or	were not	
	their	stable	all of the	involved in	
	livestock	number of	livestock	the	
	number	livestock		programme	
Nominated by the baga	40.7	32.7	33.3	44.8	
Nominated by the soum	1.8	0.0	12.9	9.2	
Made a request on own	55.6	65.3	44.2	30.4	
Friends helped	1.8	2.0	0.7	8.0	
Found the restocking programme on own	0.0	0.0	8.8	5.6	

Criteria for selecting beneficiaries (Herders' view)

4.64. Most of the beneficiaries were certain it is because they made the request on their own that they were included in the restocking programme while the herders who are not a party to the programme believe that the beneficiaries are nominated by soum or baga. The beneficiaries asserted that it was nothing to do with friends or relatives or "strings pulled to get entry", nevertheless, herders who were not involved in the programme were not there were several cases (8.0%).

4.65. Concluding from this research, the main indicators of the criteria for selecting the beneficiaries of the restocking programme were loss of most of the livestock during the natural disasters and dispossession of the only subsistence means along with being poor and having small number of livestock. Furthermore, it is stated that local authorities of soum and bagas played an important role in implementation of restocking.

Table 4.22

Role of local authorities

Roles	Number	Percentage
Aimag		
Development of the procedure	13	20.0
Determining the soums to be included in the programme	37	60.0
Reaching an agreement with relevant organizations, finding the financial resource	13	20.0
Soum		
Defining the procedure	15	12.9
Determining bagas and households to be involved in the restocking programme	30	25.9
Allocating the financial resources	14	12.1
Determining the number, age, sex and quality of animals to be purchased	17	14.7
Contracting with livestock suppliers	23	19.7
Controlling the restocking process	17	14.7
Baga		
Carrying out livestock counting to examine the contract performance of the households	17	18.3
Determine the households to be included in the programme	37	39.8
Allocate the livestock, control the increase in the number	27	29.0
Allocate the pastureland	12	12.9

4.66. The main role of aimag management or authority was to determine the soums to be included in the programme (59.7%), while at soum level, it is to determine bagas and households to be involved in the restocking programme (25.8%) and contract with livestock suppliers (19.8%). Similarly, the most important roles of the baga management were to determine the households to be included in the programme according to the relevant procedure and guidance (39.9%) and allocate the livestock (29.3%).

Characteristics, strengths and weakness of the aimags and soums implemented restocking program

Weakness	Experienced some for the timely preparatio reports and informatio restocking program pi outcomes. Households of <i>i</i> number of animals wer some households with a <i>i</i> were able to be involved requested.	Restocked livestoc households with no wi shelters. Relatives, frien priority during the meetin selection of households to restocking program.	Relatives, friend priority during the meetir selection of households to restocking program. Then administration should households nominated meeting. Galuut soum, never been involved in projects.	Implemented wit. Reports on the rest activities were delayed an time. The results were 1 due to the improper selec for the project
Characteristics and strengths	Provided livestock on 5-year term loan and particularly, male animals. This was indented to restock households with fewer animals. Some households with large numbers of animals provided livestock to their relatives at a cheaper price or they employed them as assistant herders. In some cases the soum's budget issued funding for the restocking.	Provided livestock on 5-year term loan to households with few animals or with no animals at all. Followed a procedure to give livestock to households with less than 10 large livestock units and with herding experience.	Provided livestock on 6-year term loan. The restocking program was implemented only in northern soums which had experienced drought and dzud. The livestock was provided to families with a few number of animals. Loan was provided on a 3-year term with a 5% interest rate.	Provided livestock on 9-year term loan with a condition that the large animals to be repaid from the $6^{\rm th}$ year and the small animals to be repaid from the $3^{\rm rd}$ year. Most of the soums focused on restocking households with more than 10 animals. Restocking activities were carried out successfully. The loan was on a 3-year term with 5% interest rate. Livestock of the households involved in the restocking program were subject to vaccination and insurance scheme.
Project implementing organization	World Bank	World Bank, Rural Development Fund of the President, Sankei newspaper	World Bank, Sankei newspaper, Save the Children- UK, "Fruits of Livestock" project	International Fund for Rural Development, Partnership Program of UK+
Aimag	Dundgovi	Zavkhan	Bayankhongor	Khuvsgul

Table 4.23

54

CHAPTER FIVE: OUTCOME OF RESTOCKING ACTIVITIES – INFLUENCING FACTORS

5.1. This chapter subdivides the herder households involved in the restocking program into household that grew the livestock numbers, household that kept the same number of livestock and household that lost the livestock numbers or has on animals left and compares the livestock number, income and consumption changes before and after the restocking. In addition, the growth and losing reasons of those who grew and lost their animals based on survey questionnaire. The productivities of the herder households before and after the restocking were assessed as well.

Number and composition of livestock of the households involved the restocking

5.2. In order to evaluate the results of the restocking, the changes in livestock numbers and structure of the households involved in the program were compared with the households not involved in the restocking program. In total, 185 households involved in the restocking projects were surveyed households which, grew their animals (37.7%) had an average of 134 animals, the households which, keep the same number of animals (17.8%) had an average of 84 animals and the households which, lost their animals (44.9%) had an average of 57 animals; the households not involved in the program had an average of 129 heads of livestock (Table 5.1).

Table 5.1

	Involv	ing program		
Kind of livestock	Households	Households	Household that	Household not
	that grew	that kept the	lost the livestock	involved in the
	livestock	number of	number or have no	restocking
	numbers	livestock	animals	project
Total numbers of				
livestock	134.2	84.3	56.6	129.0
Camel	0.3	0.4	0.2	4.6
Horse	7.8	5.9	3.8	11.8
Cattle	9.3	5.7	2.6	11.8
Sheep	60.3	35.8	26.0	57.4
Goat	56.5	36.5	24.0	43.4

Average number of livestock of the households involved in the study

5.3. On average, a household involved in the study had an average of 52 animals before the restocking activities and was given 48 animals to have 100 heads of livestock by the course of the restocking project. During the implementation of the restocking project, the national average was 135 heads of livestock per household. Households who received animals during the restocking program and were able to grow their number could reach the average number of livestock of households not involved in the restocking project. This indicates that the restocking is very important program for the improvement of the herder families' livelihood.

5.4. According the study, the households which, received animals during the restocking program and were able to grow their number could reach the average number of livestock of households not involved in the restocking project. This fact indicates that if households were restricted the livelihood of the herder families would be able to reach the national average.

5.5. The composition of livestock of households involved in the restocking is, in general, similar to the livestock composition of those not involved (Table 5.2).

Table 5.2

Livestock composition of the households involved in the study,
by animal types (%)

	Involv				
Kind of livestock	Households	Households	Household that	Household not	
	that grew	that kept the		involved in the	
	livestock	number of		restocking project	
	numbers	livestock	animals		
Total	100.0	100.0	100.0	100.0	
Camels	0.2	0.5	0.4	3.6	
Horses	5.8	7.9	6.7	9.1	
Cattle	6.9	6.8	4.6	9.1	
Sheep	44.9	42.5	45.9	44.5	
Goats	42.2	42.3	42.4	33.7	

Evaluation of the results of restocking

5.6. The senior officials, project implementers and herders involved in the study, positively evaluated the restocking activities. For example, 80.3-95% of the households involved in the restocking project considered that the activity was timely and right activity. However, 28.2% of the households not involved in the program believe that programs were implemented wrongly and 11.5% of them thought that it was not an effective program. All households, which, lost part or whole animal numbers do not consider that it was a good program (19.7%). This trend is increases as the outcome is not positive. They believe that although the restocking project was the right activity its implementation was organized poorly and soum and local authorities should have provided assistance at the initial stage.

Table 5.3

Evaluation weight whether the restocking program was right activity or not

Involved in the restocking program				
Evaluation	Households	Households	Household	not
	that grew	that kept	that lost the	involved in
	livestock	the number	livestock	${ m the}$
	numbers	of livestock	number or	restocking
			have no	project
			animals	
It was timely and correct program	95.5	87.5	80.3	60.3
Right program but organized wrongly	4.5	9.4	18.3	28.2
Not a very effective program	0.0	3.1	1.4	11.5

5.7. A question about the fairness of the restocking program was asked of senior officials of the aimag, soum and bagas and 49.2% of them believes that it was fair, 33.3% thought that it had not involved the households who actually should have been involved in the program, 6.3% considers that it was not fair and 9.5% of them answered that the restocking program was not timely planned.

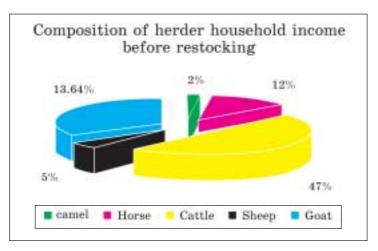
Table 5.4

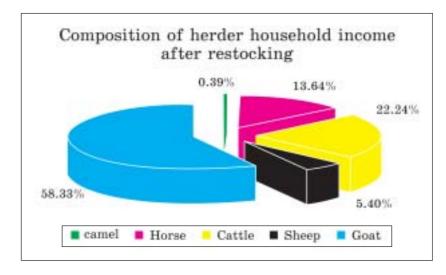
Aimags						
Kind of livestock		Zavkhan	Khuvsgul	Dundgovi	Bayankhongor	Total
Before restocking	Camels	13		24	45	82
_	Horses	171	155	134	494	954
	Cattle	206	218	55	470	949
	Sheep	1407	361	829	1200	3797
	Goats	943	623	683	759	3008
	Total	2740	1357	1725	2968	8790
After restocking	Camels	16		22	9	47
	Horses	134	178	206	444	962
	Cattle	59	337	72	420	888
	Sheep	1135	1598	1996	2230	6959
	Goats	1164	1954	2105	1385	6608
	Total	2508	4067	4401	4488	15464
Increase of livestock numbers,		-8.5	+200	+155.1	+51.2	+75.9
%	,					

Changes	of	the	livestock	numbers	received	during	the	livestock
Unanges	υı	UIIC	IIVESIOCK	numbers	received	uuring	UIIC	IIVESUUCK

5.8. The number of livestock of household involved in the restocking program before the restocking and after were compared and the total increase of 75.9% was assessed for each aimag but there were sizeable number of livestock of households involved in the study in Khuvsgul aimag icreased 3 times, in Bayankhongor aimag by 51.2%, in Dundgovi aimag by 34.6% respectively, and in Zavkhan aimag decreased by 8.4%. The increase of livestock numbers can be subdivided as follow: the number of camel and cattle decreased by 42.7%, and 6.5% respectively, the number of sheep and goats increased two times and the number of horses remain same.

5.9. Their income is assessed in relation with the change of livestock numbers. The average income of the households involved in the study is inceased by 30.2% compared with the income before restocking and as the number of livestock in Zavkhan aimag is decreased and income decreased as well but the income in other aimags increased. The following graphs show the income composition by animal type before and after the restocking program.





Picture 5.1. Income composition of herder household

According the above picture, 47% the herder's income used to come from cattle and 34% from goats before the restocking, now most of the income comes from goates (59%) after the restocking program.

5.10. Due to the lack primary information of the total and partial capital costs and labor consumption among the herders, some indicators of the productivity were impossible to be assessed. Therefore, the labor costs required to assess the labor productivity were estimated by the number of labor-capable people of the herder households involved in the restocking program. The outcome of the restocking is assessed by productivity before and after restocking program. As there were no sufficient information for productivity assessment only the labor productivity is considered. The labor productivity is assessed by calculating the products produced by the herder household before and after the restocking with current market price and divided into the number of economically active herders.

5.11. According the table all other aimags have an average of productivity of 34.7% (43.1-104.1%) except Zavkhan aimag (-34.9%).

Table 5.5

Product type						
		Zavkhan	Khuvsgul	Dundgovi	Bayankhongor	Total
Before	Total product					
restocking	thousand tugrug	18923.6	17704.0	11428.0	8648.0	14175.0
	Number of					
	economically	101	123	144	115	121
	active persons					
	Productivity tug	187.4	143.9	79.4	75.2	121.4
After	Total product					
restocking	thousand tugrug	12.318.3	25.388.0	23.327.4	17.925.6	19.739.8
	Number of					
	economically	101	123	144	115	121
	active persons					
	Productivity tug	121.9	206.4	161.9	155.8	163.1
Productivity	change, %	-34.9	+43.1	+104.1	+71.8	+34.7

Productivity change of herder households

1.12. In order to identify the influence of restocking for the reduction of poverty the households involved in the restocking are grouped by the number of livestock as up to 50, 50-100 and more than 100 compared the number of each group before and after the restocking program.

Table 5.6

			А	imags		
Numbe	er of households	Zavkhan	Khuvsgul	Dundgovi	Bayankhongor	Total
Before	No livestock	3	-	-	-	3
restocking	Up to 50	17	7	37	27	88
	51-100	15	21	7	12	55
	More than 100	7	22	5	8	42
After	No livestock	6	-	-	1	7
restocking	Up to 50	17	32	17	7	73
	51-100	9	17	15	19	60
	More than 100	10	1	17	20	48

Grouping of herder households by the number of livestock

According the table, the number of households with less than 50 animals decreased after restocking and the number of households with 50-100 and more than 100 animals increased at the same time, which, indicates that the restocking program had a great impact for the reduction of poverty.

5.13. It is clear that the restocking had certain positive impacts for the livelihood of the herders. The herders agree that as result of the restocking their income and assets and consumption increased. However, households that lost their livestock or were not able grow the number of animals are not satisfied with result of the restocking program. The 42.9% of the households grew their livestock number answered that their income increased, 32.2% increased their consumption and 20.1% increased their assets.

5.14. However, the households which, kept their animal numbers or lost said that their income and consumption increased but 22.8-23.6 % of them answered that the situation had not changed from the previous.

Table 5.7

Opinion weight of the impact of restocking for the livelihood of herders

	Involved in the restocking program				
Impact	Households	Households	Household that lost		
	that grew	that kept the			
	livestock	number of	or have no animals		
	numbers	livestock			
Increased household income	42.9	35.1	29.7		
Increased household assets	20.2	14.0	9.5		
Increased consumption	32.2	22.8	20.3		
Left with debt	1.3	5.3	16.9		
Unchanged from before	3.4	22.8	23.6		

5.15. In order to show the results of the restocking activities, we have studied the supply of high value and long- lifetime assets of herder households involved and not involved in the program. Although the automobile, motorcycle and electricity generators are basic consumer goods, the herders are not able to buy them as they wish due to their low livelihood levels. According the research, the number of households with high value assets such as automobiles, motorcycles and solar and wind electricity generators increases as their livestock heads increase.

Table 5.8

	Involved in the restocking program				
Asset type	Household	Households	Household	involved in	
	that grew	kept a similar	that grew	the restocking	
	livestock	number of	livestock	project	
	numbers	livestock	numbers		
Automobile	0.0	9.1	6.0	16.8	
Motorcycle	23.2	15.2	22.9	30.9	
Solar and wind generator	11.6	0.0	4.8	10.7	

Asset supply of households involved in the study (weight percentage of total value)

5.16. Although there is a trend to increase high value assets of the herder households involved in the restocking program with the growth of their livestock number, its has not yet reached the level of herders not involved in the program. However, the households that were able to grow their livestock have neared to the level to certain extent.

Table 5.9

Asset supply of households involved in the study by aimags (weight percentage of total value)

	Dundgovi	Zavkhan	Bayankhongor	Khuvsgul
Automobile	4.1	4.9	10.6	4.0
Motorcycle	38.8	22.0	19.5	8.0
Solar and wind generator	10.2	4.9	7.3	4.0
Automobile	8.3	22.0	20.4	12.0
Motorcycle	33.3	32.0	20.4	40.0
Solar and wind generator	20.8	8.0	13.0	6.0

5.17. During our research, it is observed that the number of automobiles and motorcycles of households involved in the project and lost their livestock was considerably high. This is explained with the following reasons:

- Because of the faulty selection criteria for the restocking, some households preferred to buy automobiles or motorcycles by selling their animals.
- Some of them understood that they could not take care of the animals so bought automobiles or motorcycles to have some sort of income to repay the loan.

The possession of high value assets defers from aimag to aimag according local need and customs

5.18. According the research, while in Dundgobi and Zavkhan aimag people prefer to use motorcycles, in Bayankhongor aimag prefer the automobiles. The high procurement of solar and wind electricity generators in Dundgobi and Bayankhongor aimag may be explained by the fact that the Gobi region has abundant supply of sun and wind all year round.

Fact 4.

"It would be better to give the automobile directly to those young people who want live luxury life instead of giving them livestock. If the livestock is with someone knows how to herd it would grow and contribute to the national development".

Comments of a pensioner of Tsetsen-uul soum of Zavkhan aimag

5.19. If the restocking program had not taken place the herders who have lost theit livelihood sources due to the natural disasters would have moved to urban areas in search of new life opportunities (11.8-25.7%). Most of them (36.2-44.1%) did not know what they would do. The opinion of the households not involved in the program has no difference. The herders who have lost their livestock did not agree with herders not involved in the program to seeking help from their relatives. This may be the indication that the rural herders does not like to herd someone else's livestock like an employee.

Fact 5

"Although our familty could not grow out livestock, thanks to the kind assistance from the government we had food on table and our two children attended school without interruption.We, the herders could not ask for more help than this""

Comment of a herder woman fron Erdenekhairkhan soum of Zavkhan aimag

Table 5.10

What would have happened if the restocking program did not take place

	Involved i	n the restocki	ng program	Household
Ways	Household	Households	Households	not involved
	that grew	kept a	that lost the	in restocking
	the livestock	similar	livestock	projects
	numbers	number of livestock	number or	
		IIVESLOCK	have no animals	
Did not know well what to do	38.4	44.1	36.2	28.4
Move to urban areas and get a job	13.7	11.8	25.7	11.9
Start new business or service	6.8	2.9	9.5	6.0
Seek help from relatives and live				
nearby	4.1	8.8	6.7	11.9
Herd somebody else's livestock	8.2	5.9	9.5	7.5
Other	28.8	26.5	12.4	
Don't know what would have been done				34.3

5.20. The more active part of the herders thought about starting a new type of business or services (6.8-9.5%). The observer households did not know what would happen to herders who have lost their livestock during the dzud if the restocking project did not take place (34.3%).

5.21. The number of households, which grew their livestock number are relatively different in each aimag. For example, the percentage of the households grew their livestock in Khuvsgul aimag was the highest with 58.3%, 38.0% in Dundgovi and Bayankhongor aimags and 9.5% or only 4 households in Zavkhan aimag.

Table 5.11

	Aimags				
	Zavkhan	Khuvsgul	Dundgovi	Bayankhongor	Total
Total households involved in	42	48	49	47	186
the study					
Households that grew their	4	28	19	18	69
livestock numbers					
Percentage of households that	9.5	58.3	38.7	38.2	37.0
grew their livestock numbers					

Number of households grew their livestock after being involved in the restocking program

5.22. This is greatly depending on the weather conditions and the season when the restocking took place. In other words, the year after the restocking took place, Zavkhan aimag experienced drought and dzud and the livestock was supplied to soums in December were main reasons for the animal losses. However, the implementation method of the restocking project, timing, herder selection criteria and quality of livestock supply also were main contributors. For example, the restocking exercise was not effective in Zavjkhan aimag and in the most successful site – Santmargats soum only 10 of 66 households involved in the restocking program were able to grow their livestock numbers.

5.23. Herder households were also questioned to find out the factors that influenced to the growth of livestock received under the restocking program.

Table 5.12

Reasons and factors that influenced to the growth of livestock received under restocking program

	Involved	in the restockin	g program	Household
Reason	Household	Households	Households	not involved
	that grew	kept a	that lost	in the
	livestock	similar	livestock or	restocking
	numbers	number of livestock	have no animals	project
Good weather conditions	25.6	30.0	6.7	0.0
Effort to grow the received livestock	58.6	50.0	28.3	51.4
Relatives and local people offered help	7.3	15.0	25.0	21.6
Assistance from baga and soum	7.3	5.0	28.3	27.0
Other	1.2	0.0	11.7	0.0

According to the study, the livestock growth depended on good weather condition as well as their self determination and effort. The households not involved in the restocking program believe that the weather conditions were no the main factor but the efforts of the herders that helped to the livestock growth (51.4%). There are some households that lost a large number of livestock received and some lost all of them.

5.24. They were surveyed in order to identify the reasons of losing some or all of the livestock 50.0-59.2% of them said that due to the natural disasters and 15.8-28.6 answered that they received few livestock heads to satisfy the household's needs. But others have different comments to the reasons for failures.

Table 5.13

	Involved	in the restock	ing program	Household not
Reasons	Househol	Household	Household	involved in the
	d that	s kept a	that grew	restocking project
	grew	similar	livestock	Households kept a
	livestock	number of	numbers	similar number of
	numbers	livestock		livestock
Natural disaster	31.4	50.0	59.2	27.6
Lack of experience	0.0	3.6	2.6	13.3
Did not prepare feed	21.1	3.6	6.6	11.2
Did not have own winter shelter	5.3	0.0	0.0	0.0
Livestock decease	10.5	0.0	2.6	3.1
Given low quality animals	5.3	7.1	5.3	18.4
Few number of livestock not sufficient				
for the family needs	26.4	28.6	15.8	7.1
Laziness, self-weakness	0.0	7.1	5.3	19.3
Sold it due to the loan deadline	0.0	0.0	2.6	0.0

Reasons and factors that influenced to the lose of livestock received under the restocking program

However, the households which, were able to grow their livestock holdings and households not involved in the restocking program considers that those are not the main reason (15.8%, 27.6%). In contrast, the third party observers believe that main reasons are the laziness and weakness of the herders (19.4%), supply of low quality animals (18.4%) and natural disaster. Among the households participated in the research, 27 in Zavkhan, 12 in Khuvsgul, 22 in Dundgobi, 22 in Bayankhongor, a total of 83 households lost their livestock that got in the framework of the restocking program.

5.25. With similar climatic condition while some herders are growing their livestock some losing it would clearly meant that main reasons must be linked to the herders' own activities. Some further questions were asked to the herders involved in the study to find out that whether the herders are helpless against the drought or dzud that are main reasons of the poverty or whether depend on the outcomes of herder's own activities or performance and although most of them replied that weather conditions were really bad, the herders who could grow their livestock or herders not involved with program attractively respected in lower numbers which indicates that bad weather condition is not the only reason to lose animals. 5.26. They named other reasons such as the provision of feed, shelter, roaming, herding experience which relate to the herders performance. The households not involved in the restocking program answered that main reason for losses is due to the lack of herding experience.

Table 5.14

	Involved in	the restockin	ng program	Household
Reasons	Household	Household	Household	not involved
	that grew	s kept a	that grew	in the
	livestock	similar	livestock	restocking
	numbers	number of	numbers	project
		livestock		
Weather conditions were really bad	49.2	59.0	35.7	39.9
Lack of feed	15.7	10.3	21.4	21.6
Poor shelters	5.3	5.1	8.2	10.6
Lack of roaming	5.3	5.0	10.5	10.1
Lack of experience	4.5	7.7	6.6	9.2
Not sufficient workforce	14.7	10.3	8.8	8.6
Supply of low quality animals	5.3	2.6	8.8	0.0

Reasons of losing livestock in drought and dzud (opinion weight)

In other words, they consider that the livestock loss is due to the herders' performance or management such as the provision of feed, shelter, roaming, herding experience and other reasons. Besides of these reasons some other reasons out of herders' control such as the isolated location from the marketplace, inefficient trading system, market price of animal products etc. influenced to the situation.

5.27. Beside the natural disasters, grazing land is damaged by rats, by migration of herders from other aimags or soums and by the lack of effective grazing land protection policy from the local government and herders. As a result, there are disputes among the herders for pasture and wells. In an 22.5% of total households involved in the program and 19.0% of households not involved in the program confirm that there are serious disputes for pasture land and water. These facts indicate that there is not solid evidence that the grazing land capacity is sufficient.

Fact 6.	Grazing	land deteriorit	ion 1998
	Category	Sq. Км	Territorial percentage
-	Not deteriorated	21.841	1.7
	Little /10%/	320.629	25.4
	Medium $/20\%/$	643.061	50.8
	Much /30%/	260.274	20.7
	Very much $/50\%/$	18.145	1.4

*- MNE. UNDP. Word fund of National Environment. Natoinal report on Mongolian Natural Resourse.1998

5.28. Based on the results of the study it is clear that the key method to improve the living standard of herders via improving the animal quality and increasing the number livestock is to create favorable animal husbandry environment and it is concluded that the restocking project should have been in conjunction with improvements in pastureland management policy.

5.29. The age, education, production environment, social, living conditions of herders who have grown, kept same and lost the number of livestock were investigated in order define the reason of losing the livestock numbers. 185 households involved in the restocking program and 178 households not involved in the program from four aimag participated in the study and 33 of them were female headed families

Table 5.15

	Dundgovi	Zavkhan	Bayankhongor	Khuvsgul	Total
Total surveyed	49	42	44	50	185
Of which: female headed					
household	6	9	14	4	33
Average age of the surveyed	40	41.7	39.3	37.4	40.1
	.5				
Herding experience (year)	22.8	17.7	17.3	11.5	17.5

Description of herders involved in the study (by aimag)

5.30. 57 officials of aimag, soum, baga's administration involved in the restocking program, 23 persons from the implementing organizations were subject to questions. A number of surveyed senior officials of aimag, soum, baga's administrations had active involvement in the project implementation.

5.31. The average age of the surveyed persons was 40 in every aimag. They have an average herding experience of 17.5 years While, the herders surveyed in Dudgovi aimag had experience of many years, the herders surveyed in Khuvsgul aimag had fewer years of herding experience.

Table 5.16

Description of herders involved in the study (by restocking)

	Involved in the restocking program			
Indicators	Household	Households	Household that	
	that grew	kept a similar	grew livestock	
	livestock	number of	numbers	
	numbers	livestock		
Total surveyed	69	33	83	
Percentage	37.3	17.8	44.9	
Of which: female headed household	7	7	19	
Average age of surveyed	40.5	39.8	39.9	
Herding experience (years)	14.8	20.1	16.2	

5.32. In order to find the impact of the age, gender, work skill, work experience of the family members involved in the restocking project on the outcome of the program, their age, herding experience were studied by each category of households that had grown, kept the same and lost livestock. Of the total 55.1% of the surveyed households had either grown or kept the same number of livestock, and 44.9% of them had lost some or all of their livestock holding as regards. While only 21.2% of the households headed by single mothers were able grow their livestock, 57.6% of them lost their livestock of left with any animals at all, which shows the fact that the single mothers have less potential for the animal husbandry as they suffer from psychological pressure, lack of sufficient income and as they raise their children alone.

The herding experience did not influence to the lose of livestock but the gender issue had certain extent of impact for the livestock lose.

Education

5.33. In order to investigate the impact of education level for the restocking program outcome the education level of herders who involved in the program were studied. The education level of the herders does not appear to have a great impact on increase of livestock numbers. Particularly, among the households which, lost some or whole livestock, the percentage of persons with university or higher education degree is quite high (41.1%). This may indicate that the wide involvement of former employees who have lost their jobs before the launch of the restocking project.

Table 5.17

	Involv	red in the restocking pr	ogram
Education level	Household that	Households kept a	Household that
	grew livestock	similar number of	grew livestock
	numbers	livestock	numbers
University	2.9	2.8	21.0
Vocational	11.8	13.9	20.2
College	32.4	25.0	12.9
High school	38.2	13.9	22.5
Primary	13.2	30.5	16.9
No former education	1.5	13.9	6.5

Education weight of the herders involved in the study.

5.34. The final outcome of herder household's performance usually expressed by accumulation of valuable possessions. Therefore, in order to show the results of restocking project the accumulation of valuable possessions of households involved and not involved with the project was investigated. Although, the automobiles, motorcycles or electricity generators are actually basic household items, because of the low living standard of the herders they can not be purchased that easily. These are good indicators to evaluate the livelihood level of herders as they purchase those items once if they have extra income above daily needs.

5.35. Having both winter and spring shelter is very important precondition for good animal husbandry. Most of the herders have their own animal winter shelters the number tends to decrease as the number of livestock is being reduced. The right of herder households to own grazing land is put into practice by having winter and spring settlements. If a herder has own shelter with good pasture land he has the right own that area. Nevertheless, it could be one of the reasons for the livestock losses if restocking provided to those have a limited number of livestock heads with no own winter or spring settlements.

Table 5.18

	Involved	Involved in the restocking program			
Property type	Household	Households	Household	involved in	
	that grew	kept a similar	that grew	the restocking	
	livestock	number of	livestock	project	
	numbers	livestock	numbers		
Own winter settlement	81.2	63.6	56.6	72.0	
Own spring settlement	47.8	39.4	36.1	46.0	
Households considering that the					
winter and spring pasture are					
sufficient	63.8	63.6	61.4	68.0	

Availability of winter and spring settlements and grazing land capacity (weight percentage of total value)

5.36. Most of the herders do not have their own spring settlement, particularly, the herders who have lost their livestock. Almost two thirds of those surveyed considered that their winter and spring pasture land's capacity is sufficient. The survey conducted to find out the reasons of losing the livestock shows that insufficient preparation of animal feeds, lack of animal shelters and lack of animal husbandry experiences are the main factors to negatively influence to results of the restocking program.

5.37. As conclusion, the reason of losing the livestock is not related to their ages, education or living conditions but to the occurrence natural disasters and their own performances.

CHARTER SIX: WAYS TO IMPROVE RESTOCKING ACTIVITIES

6.1. This chapter defines the appropriate ways to make the results of restocking activities more efficient based on the comments and opinions of of the herder households involved and not involved in the program and some government officials and it reflects vision of the herders for the future. In addition, the procurement of basic consumer goods is estimated by the percentage of households considering that their needs have been fulfilled.

Comments about the ways to improve the restocking program

6.2. As the restocking program a basic method to improve the livelihood of the herders, the participants in the study were asked their own thoughts and comments.

Table 6.1

	Involved	in the restocking	ng program	House
Suggestions	Household	Households	Household	hold not
	that grew	kept a	that grew	involved in
	livestock	similar	livestock	the
	numbers	number of	numbers	restocking
		livestock		project
Given more livestock heads to a				
household	32.6	50.0	23.6	19.7
If had pay-back terms	4.7	0.0	12.7	15.2
If had no pay-back terms	9.3	4.6	8.2	8.3
Properly select the households	16.2	13.6	16.4	33.3
Circum ann antamitian ta man athan taman				
Given opportunities to run other types of production or services	4.6	9.1	19.1	9.1
	4.0	9.1	19.1	9.1
If restocked with high quality and selected bred animals	32.6	22.7	20.0	14.4
selected bred annuals	52.0	44.1	20.0	14.4

Suggestions for making restocking program more effective

6.3. While the households not involved in the restocking program consider that if would have effective if properly selected the household to be involved in the program (31.6-56.3%), the households involved in the restocking program believe that it would have been effective if the number of livestock given was greater (23.6-50.0%). However, the households not involved in the restocking program do not support this idea (19.7%). Considerable part of the households participated in the study thinks that it would have been successful if the livestock supplied were of high quality, elite animals.

Views of Managements

6.4. 41.3% of management officials surveyed thought that it would have been effective if the livestock were given with contractual or lease term, 20.6% if the restocking were as grant aid, 17.5% if given in loan form and 15.9% considered would have been effective if the restocking was provided only to collectives. The results are shown in the following table:

Table 6.2

Methodology	Number	%
If the restocking were provided as grant aid	13	21.7
If provided as a loan	11	18.3
If restocking were provided to collectives only	10	16.7
If the restocking were provided with lease terms	26	43.3

Proposal to improve the restocking methodology

Herders' vision of future

6.5. The satisfaction of herders on their current living sources is reflected by their vision for future. Many herders believe that the animal husbandry has a limited future or are thinking of seeking a different lifestyle or at least are not keen for their children to become herders.

Table 6.3

	Involved i	n the restockin	ng program	Household not
	Household	Households	Household	involved in
Indicators	that grew	kept a	that grew	the restocking
	livestock	similar	livestock	project
	numbers	number of	numbers	
*****11 /1 1/ / 1 1/ / 1		livestock		
Will grow the livestock and live in rural		70.0	F0 F	01.1
area	86.5	70.8	50.5	81.1
Expecting that the restocking program				
may be implemented again	2.7	2.8	8.7	0
Move to urban area and get job there	2.7	4.2	7.8	0
Live with to relatives	0	1.4	3.9	0
Herd somebody else's livestock	0	0	1.9	3.8
Start new production or services	0	6.6	8.7	0
Don't know what to do	0	14.2	18.5	0
Will improve animal quality	$n \setminus a$	n∖a	n\a	15.1

Ideas and comments about the future life

6.6. Most of the households, which had grown their livestock will live on their native land carrying out animal husbandry (86.5%), 7.8% of the households, which lost part or whole of their livestock will move urban areas to find jobs and 8.7% of them will start new production or services. Between 50-60% of households that were not able to increase their livestock numbers or lost their animals do not want continue with animal husbandry.

6.7. The following table suggests that the animal husbandry has no future for those who have a limited number of livestock and but only for those, who were able to grow their livestock.

Table 6.4

	Involved	Involved in the restocking program			
Evaluation	Household	Households	Household	not	
	that grew	kept a	that grew	involved	
	livestock	similar	livestock	in the	
	numbers	number of	numbers	restocking	
		livestock		project	
Think that has a future	61.2	54.8	57.3	62.9	
In general it has become doubtful	34.3	29.0	26.8	30.6	
Unlikely to continue with animal					
husbandry	4.5	16.2	15.9	6.5	

Does the animal husbandry have a future?

6.8. Although the restocking program had certain degree of impact for the improvement of poor herder families, it did not provide a decisive influence to their livelihood. Study results confirm this fact as the households involved in the restocking project still experience a shortage of items of essential living needs.

Table 6.5

Supply situation of essential needs of herder households (weighted percentage of the households considering that needs are met)

	Difference of animal growth of households			
			Lost part or	
	Grew	Kept the same	whole of	
	livestock	livestock	livestock	
		number		
1. Sufficient food	21.9	44.9	30.2	
2. Sufficient clothes	19.1	10.2	15.5	
3.To send the children to school	12.4	13.2	10.1	
4. To send the children to university	3.7	5.1	4.6	
5.For home improvement	6.2	5.1	11.2	
6. To have own automobile	5.1	4.1	8.5	
7. To prepare animal feed	4.6	1.0	8.3	
8. To prepare animal shelter	14.6	8.2	5.8	
9. To improve the livestock breeding	12.4	8.2	5.8	

6.9. According the study, most of the households involved in the restocking program lack food and clothes, have problems in sending the children to school and making home improvements and having own vehicle is just a dream! The lack of funding possibilities to improve the animal quality, to construct animal shelters or to prepare animal feed has a very negative influence to the animal husbandry production.

CHAPTER SEVEN: WAYS TO IMPROVE THE LIVELIHOOD OF HERDERS

7.1. This chapter identifies the reasons to specially address the ways to improve the livelihood of herder households, classifies the livelihood differences of herder households into extremely poor, poor, middle and wealthy and reflectes the number of livestock and family members and their thoughts about the business environment and the future. In addition, we have developed a system of activities to improve the livelihood of the herder households and a model to be followed for the restocking program.

Characteristics of objective to improve the livelihood of the herders

7.2. The research materials of other organizations on livelihood of the herder households and our analysis conducted during the course of project opened the possibility to consider certain concrete ways to improve the livelihood of the herder households. The study on the livelihood level of the Mongolian population and ways to improve it was carried out by the National Statistical Center in 1995, 1998 and 2000 in cooperation with international organizations. It developed a concept paper with regard to the comprehensive actions to be taken at national level. These guidelines have been used as the basic concepts to define ways to improve the livelihood of the herder households. Although some selected studies on the livelihood levels of the population were carried out with deep

	1	Difference of live	elihood level	
	Very poor	Poor	Fair	Wealthy
Animal husbandry		+	+++	++++
Pension. subsidies	++++	+++	++	+
Salaries	+++	+++	++	
Production, services other than				
animal husbandry	++	++++	+	+
Assistance	++++	+++	++	
Usage of naturak resources	++	+++	+	
Hunting	++	+++		
Small scale trading		+	++	
Price difference between central				
and local markets			+	++

analyses, they did not study the different groups of the population, their characteristics and differences localities and production levels that influence people's livelihoods. 7.3. The following basic reasons make us to consider ways to improve the livelihood of the herder households:

- 1. The basic source of herder households' livelihood the animal husbandry production depends directly on nature and weather conditions. The worsening of weather conditions throughout the Mongolian territory, the general global climatic changes, scarcity of natural resources that are vital for animal husbandry due to the human and nature relationships are influencing negatively to the pastureland animal husbandry and making uncertain the future of herder households' livelihood. At the same, time the investment and attention of the government to protect the industry from risks are weakened.
- 2. The uncertainty of the socio-economic situation of rural areas is greater than urban areas and rural residents have started to lose the guarantee of living in safer environment. The economic uncertainty of the herder households is expressed by the lack of financial resources required for living and production, lack of market and by being forced in to secret underemployment. Today's social uncertainty of herder families also can be interpreted by the weakening of communication among herder households including the slow transfer or goodwill assistance of relatives to monetary forms, reduction of social protection and services to herders, decrease of types and weakening of attention from the local administration. In addition, negative social phenomena such as the over consumption of alcohol and theft (particularly livestock theft), and family violence are rapidly spreading in rural areas. This also contributes to the loss of guarantees to live in a safe environment.
- 3. The isolated and separated locations of herders due production characteristics also brings difficulties to cooperate with each other, to be involved common social, cultural, educational services and to implement activities for the improvement of animal husbandry production.
- 4. There are no production or service business opportunities other than the animal husbandry because of the lack of economic opportunities and limited market in rural areas. As result, poor people or herders who have lost their livestock or young people starting their lives from poor families are increasingly moving to the cities and urban areas in search new life opportunities.
- 5. The inequality in herder household's livelihood is increasing in every corner of Mongolia. Thus, there should be differentiated policies for wealthy and poor herders.

Table 7.1

	Difference of livelihood levels				
	Very poor	Poor	Fair	Wealthy	
Livestock numbers and situation	Very poor 1. No livestock or very few 2. The age, gender and type compositi on of the livestock that are lost very unfavorab ly	 3. 20-30 animals per a family member Average animal quality 4. The age, and gender compositi on of the livestock that are lost very 	 5. 30-40 animals per a family member 6. Average animal quality 7. The age, and gender composit ion of the livestock are 	8. More than 50 animals per a family member 9. Good animal quality 10. The age, and gender composit ion of the livestock	
Family situation Possessions	 Large family Poor labor capacity No one receives salary Small ger Low quality, old 	unfavora bly 4. Large family 5. Few persons with labor capacity 6. Few persons have job/salary 5. Medium size ger 6. Old furniture	satisfact ory 7. Average size of family 8. Has people with labor capacity 9. Medium size ger 10. Normal	are proper 9. Average size of family 10. Has people with good labor capacity 13. Good quality ger	
	furniture and goods 3. No valuable assets 4. No means of transportation	and goods 7. No valuable assets 8. Horse and camel transportation	furniture and goods 11. Limited valuable assets 12. Horse, camel and motorcycle transportation	 14. Quality furniture and goods 15. Valuable assets 16. Sufficient means of transportation (automobiles, motorcycle, electricity generator) 	
Animal husbandry business environment	 Does not have own winter and spring animal shelters Mostly live in soum center 	 Some have winter shelters Mostly live in neighborhood of others No own well 	 Most of them have own winter shelters Some have own wells 	 All have winter and spring shelters, some 2 winter settlements Own wells 	
Ideas about the future	• Increased assistance from the state and government	 Work if job is found If possible send the children to school 	 Increase the number of livestock Seek for additional income channels 	 Improve the animal quality Send some children to universities 	

Different characteristics of livelihood levels of herder households

- 6. The fact that the basic and professional educational level of the herders is relatively low and lack of ability to improve those conditions causes problems for them to transfer their lifestyle and associated with the market economy, take initiatives to manage animal husbandry businesses in constantly changing new ecological and economic environment and to improve their livelihood by carrying out new production and service businesses.
- 7. The herders psychologically do not and would not accept herding somebody else's livestock or being servants of wealthier families. Although they are poor, they don't like being servants of a local individual, so they are only willing to do any kind of job in other part of nation. The above makes clear the specific characteristics should be considered for the improvement of

livelihood of the herder households.

Structure of actions to be taken for the improvement of livelihood of herder

households

7.4. Many activities such as restocking, pastureland management, improvement of wells, capacity building, training, cropping, auxiliary production, service business etc. were implemented in the framework of the improvement of livelihood of herder households. However, results were not satisfactory as they were separated from each other instead of being implemented as whole. Therefore, we propose a comprehensive set of actions.

7.5. We believe that the following complex of basic actions should be taken for the improvement of livelihood of herder families:

- 1. Create conditions for each herder household to carry out animal husbandry effectively:
 - Select and restock households that are capable of carrying out animal husbandry and are willing continue to settle in the locality
 - Establish equal pastureland and wells for each households for the animal husbandry
- 2. Establish a structure to prevent and protect the animal husbandry from weather risks
 - Support forms of cooperation such as herder groups and cooperatives
 - Improve the supply and management of pastureland, pasture and water
 - Improve the veterinary services
 - Establish a disaster management structure
- 3. Improve the productivity of animal husbandry
 - Develop market-oriented settled or semi-settled animal husbandry
 - Improve Mongolian grazing livestock quality
 - Improve the processing of animal products
- 4. Create additional income sources besides animal husbandry
 - Provide services for the improvement of education, culture, and consumer services for herders
 - Improve the marketing of animal products (processing and sales)
- 5. Improve the educational level of herders
 - Improve the general education level
 - Increase the knowledge and experience level of livestock herding technologies
 - Provide skills and knowledge to carry out other service and productive businesses.

A model for restocking programme implementation

7.6. Taking into consideration the lessons learned from the restocking project implementation, it is recommended that project implementation should be approached with long term monitoring. The restocking program could be carried out with the following model.

7.7. First of all, establish a group of herders as cooperative, company or NGO and

investment will form the joint capital of the group. The members of the group or cooperative will contribute for the establishment of the joint fund by investing as much as they can.

7.8. The herders will work on contractual or lease term receiving salaries to accommodate their everyday needs for the enterprise with productive conditions established with the joint fund herders' group or cooperative and funds from project financing organization. The contract or lease would have with easy terms and the proceedings of the project financing organization should slowly be transferred to cooperative members according their shares. In doing so, it would be more appropriate if the assets transfer should not be in form of monetary or property means but in form of increasing their contribution shares for the cooperative or group. However, each herder household should be allowed to leave the cooperative with their assets and also have the ability to admit new members. Some part of the investment from the project financing organization may be in form of long and short term loan with low interest rates.

7.9. The investment should be aimed not only at restocking but also establishment of a new animal husbandry business environment. The restocking program should not be focused to increase the existing livestock numbers but to improve the pastureland and water supply management taking into consideration the constantly changing environmental conditions and to create basis for the development of intensified animal husbandry.

7.10. The experience of restocking project implementation shows that the restocking alone cannot be foundation for the improvement of the livelihood of herders. Therefore, the restocking should be combined with improvements in animal husbandry's business conditions, management and improvement in the sale and marketing of animal products. Investment scope will be different for each aimag or soum depending on the production and ecological characteristics. It is important to start the improvement of animal breeding with restocking. To do so, good quality, elite animals should be purchased at the same time with the project implementation start.

7.11. In order to get effective results from the restocking project, it is important the parallel coordination additional activities such as improvement of water supply in grazing land, preparation of animal feed, provision of animal shelters and improvement of veterinary services along with the restocking program. Those activities would require more funding than the restocking itself, but the final outcome would be more effective and more stable than the restocking alone.

7.12. Assistance is required for the establishment of other structures for additional income beside the support of animal husbandry production in order to improve the livelihood of herders. The following are the main reasons to carry out additional production or services in the herder's group or cooperative:

- Increase the herder households' income
- Increase the employment of household members
- To reduce temporary and seasonal unemployment
- Provide skills to herders, particularly to the young people, to process animal products and to carry out other productive activities. This would reduce the problem of being solely dependent of animal husbandry
- Expand the service coverage for herders

CHAPTER EIGHT: RECOMMENDATIONS AND CONSULSIONS

BUILDING AND SECURING THE INCOMES AND LIVELIHOODS OF HERDER HOUSEHOLDS THROUGH ENHANCED HERD RESTOCKING STRATEGIES

One. Number and composition of animals to be distributed through restocking activities

8.1. During the research, a considerable part of the herders commented that it would be more effective if the number of animals allocated through the restocking programmes to per household as much as possible. This is simply because a herder household that has a small number of livestock merely or can not cover its expenses with its income, hence is unable to make visible improvements. Thus it is important for a restocking programme, when distributing livestock to herder households, to make sure that there are enough animals to grow and increase number, not only to cover the needs of the herder household. It is recommended that the number of livestock allocated to per beneficiary must be not less than 200.

8.2. Livestock provided by a restocking programme must consist of a herd of appropriate composition for the needs of the beneficiary household. The more types of animals a household had, the less the risk that it takes. Moreover, the special characteristics of the area should be considered in the herd composition decision. For instance, it has been estimated that if a household settling in high mountain and forest-steppe area has 200 animals consisting of 10 horses, 20 cattle, 100 sheep, and 70 goats, it can well cover all its expenses (970 thousand tugrugs) with its income (1140 thousand tugrugs) and be profitable.

8.3. It is most suitable to hand over the animals during the beginning of the warm season (June and July) and set the conditions to start there payment from the third year for small animal and sixth year for large animal.

Two. Enhancement of restocking activities

8.4. It is recommended that further activities be carried-out to create a new environment for herding in a thorough manner, implementing a long term programme ensuring control and increasing the accessibility.

Successful restocking can be carried out in the following two main mechanizm:

1. Restocking herder groups:

8.5. The above mentioned recommendations is especially suitable when restocking groups or communities of herders. In doing so, you should organize herders either as a household group, herder cooperative, company or non-government organization and then provide livestock which will be make in common ownership. Members of either group or cooperatives must do investment to the organization to his/her capacity, and be a shareholder. The funding granted to the herder group through the restocking programme shall be transferred to the group via local administration which shall be under regular control of soum people's representatives' meeting.

8.6. The herders would then employed by and work for the herder group with a capacity consisting of the investment of the members and funding by the financing agency on contract basis and get wage or salary. A herder group is required to be a unit with a qualified management capable of performing technological management, bookkeeping & accounting and controlling functions. The conditions of leasing and contracting should be soft and it will be appropriate to constitute that the size of the share of the members in the group assets can be changed as they increase or decrease the investment in the group. What must be ensured is that a member household is free to leave the group taking its assets with it, and similarly, it should be open to new members.

8.7. Some part of the funding by external financiers can be spent not only for restocking purposes but also for improvement of the condition of livestock production activities. The following requirements need to be addressed:

- Restocking activities should not have goal of crudely increasing the number of pastoral livestock, instead, they must be directed towards refining the management of pastoral animal husbandry considering the changing natural condition and furthermore, putting the foundation of development of intensified animal husbandry. Improvement of strain must be implemented in line with restocking. The first step shall be purchasing and distribution of selective breed animals.
- It is necessary to link the restocking activities with establishment of the infrastructure of agricultural development. This what is required are composite programmes, including additional activities as; improvement of pastoral water supplys, hay preparation, provision of facilities, rectifying of veterinary service, and contributing to the rural infrastructure development. Although these activities need more financial resources to be implemented, they are more effective and tangible.

2. Restocking herder households

8.8. It is sane to restock individual herder households whose members are committed to animal husbandry, have adequate labor and other resources to run the business (winter/spring settlements, transportation means) and are financially capable to pay back the loan.

- The selection of beneficiaries of individual restocking should be entrusted with soum people's representatives' meetings
- The beneficiaries should be have some rights in terms of choosing the animals to get through restocking.

Three. Building and securing the incomes and livelihoods of herder households

8.9. The following objectives must be accomplished:

- Maintain the restocking efforts,
- Increase employment levels and encourage the household members,
- Improve the productivity of livestock production,
- Protect animal husbandry from risk,
- Eliminate cultural backwardness of the herders,

- Improve the services of Bank and other financial organizations for herders. 1. Maintain the restocking efforts
- Restocking, an important mechanism to improve the livelihoods of herders and should be carried out as specified above.
- 2. Increase employment levels and encourage the household members to be fully employed

The employment problem of household members needs to be solved by:

- Encouraging them to be engaged in ancillary and other industries
- Developing a supporting infrastructure for facility construction, irrigation, hay & fodder preparation, far distance roaming, veterinary service delivery, etc.
- 3. Improve the productivity of livestock production

The key method of improving the effectiveness and efficiency of livestock production is to increase the productivity of the animals which right be done in the following way:

- Planned improvement of livestock quality using the selective breeding males
- Carrying out breeding in a highly professional way strictly following the technological procedures
- Introduction of intensified technology suited to local condition
- 4. Protect animal husbandry from risk

Ways of protecting the livestock production from threats and minimizing the risk:

- Lease the pasturelands on a long-term contract basis
- By improving irrigation, make use of under exploited pastures
- By scheduling the pasture use, allow natural restoration
- Fence the pasture for intensified animal husbandry and use it systematically
- Have specially planted fields for hay preparation, and pasturing
- Establish an emergency fodder fund
- By fattening and using for milking, gradually transform the livestock system to one based on intensified animal husbandry.
- Get the livestock involved in all the necessary veterinary services
- Conclude contract on product supply with consumer organizations specifying the price, size, and quality
- Teach the herders in sorting and primary processing of livestock products
- Provide facilities to store and process the products.
- 5. Eliminate cultural backwardness of the herders
 - 1. To eliminate cultural backwardness
 - Provide general education home training for young people who have dropped out from schooling
 - Conduct training among herders on carrying out activities other than animal husbandry
 - Involve the herders in health inspection at least once a year
 - To prevent from loss of balance of nutrition, teach them to plant and use vegetables
 - Encourage herder groups and cooperation to establish bath house,

hairdressers, cosmetic salon, carpenters, tailors and libraries to serve the herders

- Enable households to enjoy radio and TV by providing them with electricity generator that used renewable energy (wind and solar energy)
- Make Baga communication system more accessible for the herders.

6. Improve the services of Bank and other financial organizations for herders To improve the bank and other financial organization services for herders:

- Transfer the herder households into legal bodies with a of business entity status
- Provide low interest rate, long and short term loans for development of animal husbandry

RECOMMENDATIONS & CONCLUSIONS

1. As a result of the transition of Mongolia to the free market and privatization, 96.7% of our livestock were transferred to the private sector giving a distribution of 135 livestock per capita as of 2000. During the winter and spring dzud of 1999-2001, 7.6 million animals were lost. As result of these consecutive dzuds and droughts, a very large number of herder households lost their livestock and became part of poor and sensitive group. Therefore, the goal of this project was to evaluate the implementation and the results of activities carried out by many international and domestic organizations to reduce the poverty of herders and to define methodologies to further improve their livelihood.

2. The study was conducted in three stages of information gathering, detailed analysis of the results and elaboration of conclusion and recommendations. During this study, many data collection methods such as targeted and random statistical staged information gathering, questionnaires, interviews and participatory methods were used. The following key groups were chosen as the main study units for the analyses of restocking program and livelihood of the herder households:

- a. Households involved in the restocking project
- b. Households not involved in the restocking project
- c. Administration officials of aimag, soum, baga involved in the restocking project
- d. Organizations and persons involved in the coordination of the restocking project

3. 4 aimags, Dundgovi, Zavkhan, Bayakhongor, Khuvsgul, out of 13 aimags suffered the dzud were selected. For the selection of the aimags a targeted random method was used based on the data and information of the previously conducted research works. To do so, the following criteria were used: amount of damage, number of livestock, households, soums involved in the restocking program, regional differences in natural conditions, frequency of dzud and drought occurrences and differences between project implementation organizations. After gathering the information in the selected aimags, soums, the next level of the research, were identified. Then the bagas, the sub-unit of soums, were selected. The final level of the research was herding households which were selected to be researched in baga level. For the selection of herder households to be involved in the study, the indicators of finance per household, growth of livestock and specific characteristics related to the restocking program in line with recommendations given by the officials and specialists of the soum administration. However, for the selection of households not involved in the restocking program random selection methods were used.

4. It is claimed, especially on media, the disasters of dzud and drought, shortage of natural resources, deterioration of grazing land and general poverty of herders constitute the main reasons for restocking programmes.

5. As restocking projects implemented in Mongolia helped to increase the livestock number, productivity, household income, consumption, and assets of poor herder households, to reduce the number of household with few livestock number and to alleviate the poverty, they were an important contribution to improving the livelihood of the herders. However, due to the management mistake the activities implemented in the past did not accomplish their expected results in many cases. It was important to focus on the proper selection of household to restock, define the number of livestock based on the household need and ensure the supply of good quality animals. It is clear that restocking is not the only answer to the question of how to build and secure the incomes and livelihoods of herder households. In this essence, it critical to constitute a financial and legal environment that encourages the development of intensified animal husbandry and other types of industry and supports the herders to collaborate their efforts and acquire ancillary business.

6. To implement a successful restocking strategy, it is important to consider the uniqueness of pastoral animal husbandry and the special characteristics of the locality and features of the household's livelihood and have constant monitoring on the implementation and results and follow the principle to reach as many herder households as possible.

7. In order to improve the livelihood of the herder households, the following additional activities should be carried out in parallel with the restocking efforts:

- Provide households with access to grazing lands and good quality wells, this means monitoring both the grasslands and the availability of water from public wells.
- Establish a structure to protect herders and prevent risks
- Improve the animal quality restocking with elite animals
- Conduct training for the improvement of herders' education and knowledge
- Create the conditions for additional income channels to be realized.

BIBLIOGRAPHY

- Animal oriented food productions resource and sufficiency, 1999, project report
- Arhangai and Huvsgul rural poverty alleviation project, IFAD Loan No.412-MN, Supervision Mission Report
- Conference on Rural development held between the Government Mongolia and donor agents' 2002
- Daniel Miller* August 2001, Pastoral Risk Management Strategy and Action Plan, Mongolia: Sustainable Livelihoods Project
- Government of Mongolia "The National programm on Prevention of Drought
- Implemenation guide to restocking project for herding hiuseholds affected by natural disaster
- Internal migration study at micro level in Mongolia, 2000
- Fact sheet on Internal migration in Mongolia, 2000
- Herdins households status: economical, financial, legal, 2002, project report
- Human development report, 2000
- Lessons learnt in disaster preparation and mitigation from the Mongolian zud, 1999-2000, EXECUTIVE SUMMARY
- National programme for protecting livestock against drought and dzud, 2001, 1^{st} annex of 47^{th} resolution
- Ralph A. Van Gelder, May 2000, Livestock Products Marketing Sector Analysis, Mon/98/132, UNOPS, Enterprise Restructuring Project
- Ralph A. Van Gelder and D.Shombodon, December 1999, Some Mechanisms Interfering in Market Chains or the Mongolian Livestock Industries, The International Symposium of "Nomads and the Use of Pastures Today"
- Poverty reduction project in Arkhangai aimag, 2000 project report
- Poverty reduction project in Khuvsgul aimag, 2000 project report
- The national programme for poverty alleviation 1994-2000
- Sustainable Livestock Production, MON/99/201, UNDP Mongolia
- Sustainable Pastural Management, 2001, seminar materails