

FOOD SECURITY



In Northern, Eastern, North Central Provinces A Food Security Assessment Report Sri Lanka 2011



**World Food
Programme**

Ministry of Economic Development
Hector Kobbekaduwa Agrarian Research and Training Institute
United Nations World Food Programme

Food Security in the Northern, Eastern and North Central Provinces

A Food Security Assessment Report
Sri Lanka, April 2011

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Executive Summary

The United Nations World Food Programme (WFP), the Ministry of Economic Development (MED) and Hector Kobbekaduwa Agrarian Research and Training Institute (HARTI) conducted a joint and comprehensive food security assessment in April 2011. The assessment covered the five recently conflict affected districts of northern Sri Lanka (Jaffna, Killinochchi, Mullaitivu, Mannar and Vavuniya) and five of the most flood affected districts in the Eastern and Northern Central Provinces of the country (Trincomalee, Batticaloa, Ampara, Anuradhapura and Polonnaruwa).

Primary data collection included household interviews for quantitative analysis and key informant interviews for qualitative analysis. The assessment covered 165 locations and 2,474 households, employing a stratified, two-stage random sampling approach. It is the largest survey ever conducted by WFP in Sri Lanka. Findings are statistically representative of the overall population of sampled districts.

Over 60 percent of households in the Northern Province are food insecure (46 percent moderately food insecure and 15 percent severely food insecure). This despite improvements among the returnee¹ population in income and food security levels since October 2010. The trend and severity of food insecurity are particularly worrisome in Killinochchi. Low income levels and high food prices have led to weak purchasing power of households in the Northern and Eastern Provinces. As a result, there are signs of asset depletion, high indebtedness and adaptation of relatively serious coping behaviors, especially in the Northern Province. In Vavuniya and Jaffna, the level of need in the not recently returned population – a population not typically the focus of assistance – is of similar severity as the recently returned population. The most substantial food assistance reduction is expected in Mullaitivu where the situation requires close monitoring in the near future.

Dietary intake shows a clear deterioration from October 2010 to April 2011 among returnees in the Northern Province. A simultaneous and significant reduction of food assistance suggests that food assistance did play an important role in maintaining adequate food consumption for the recently returned population. As food assistance has been gradually scaled down, the dietary intake of households has shown significant deterioration, to levels below what is required.

Batticaloa is also a region of concern. The dramatic floods in January and February affected nearly the entire population and on many food security indicators the district now performs as poorly as the Northern Province. The floods coincided with the major agricultural season and as a result vast areas of standing crops were washed away or submerged. Although the effects were devastating, the flood impact on livelihoods is believed to be subsiding. However, in some areas (particularly those where *yala* is not cultivated) the situation may not be normalized until early 2012.

The total number of food insecure persons in the sampled area is 1.7 million, 78 percent of whom are in the Northern and Eastern Provinces. Out of the total population, 12 percent are *severely* food insecure, of which 82 percent are in the Northern and Eastern Provinces. Food security interventions are needed to create capacity and productive assets among this very large food insecure population. Conflict affected households in the Northern Province, especially in Killinochchi and Mullaitivu, and

¹ For the purposes of this assessment, the word “returnee” includes resettled households (returning from displacement to their places of origin) and relocated households (returning to places different from their places or origin).

severely flood affected households, particularly in Batticaloa, require sustained and comprehensive action, both interventions to relieve hunger in the short term and medium-term interventions to strengthen livelihoods.

It is necessary to expand the coverage of the Samurthi safety net to food insecure areas of the Northern Province, especially Killinochchi, Mullaitivu and Mannar. Attention should be given to the review of land use policies to resolve the extensive reports of unavailability of land and to the scaling-up of agricultural extension services for farming and livestock.

Given prevalent food insecurity, coupled with the deteriorating dietary intake, innovative food assistance – as part of an overall strategy to rebuild productive livelihoods – remains a natural modality of recovery and development assistance.

With the expected continuation of the reduction of food assistance to the Northern Province, it is likely that food security conditions will deteriorate in the coming months, particularly when the lean season approaches. Therefore, food assistance should be extended to food insecure households until their livelihoods are re-established and systems for the monitoring of the food security situation should be introduced.

Preface

Food security is a national priority for the Government of Sri Lanka, clearly spelled out in the Mahinda Chintana Vision for the Future. Our commitment to the food security of the Sri Lankan people is manifested in the comprehensive and dedicated efforts being undertaken by the Ministry of Agriculture, the Ministry of Economic Development, the National Food Security Committee, Hector Kobbekaduwa Agrarian Research and Training Institute (HARTI) and other national institutions. Our goal is a fully food secure nation, where all Sri Lankans have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

This survey that covered the Northern, Eastern and North Central Provinces of the country will assist the Government in the development of evidence-based national policies and projects aimed at removing constraints to the improvement of food security conditions. The Government of Sri Lanka takes very seriously the challenge to actively foster an environment where communities and households can establish sustainable livelihoods that generate sufficient food and income for a healthy and productive life.

I would like to take this opportunity to thank the Hector Kobbekaduwa Agrarian Research and Training Institute, the Ministry of Economic Development and the United Nations World Food Programme for jointly conducting this survey and thus providing us with important information and policy tools. My great appreciation also goes to the over one hundred persons engaged in this immense research effort and to the 2,500 households who patiently took time out of their everyday life to participate in the survey.

The Ministry of Agriculture recognizes that although positive progress is seen in many areas, further improvements are needed. A comprehensive and concerted effort by national and international actors to realize policies and programs that eradicate food insecurity is urgently required. The Government of Sri Lanka is committed to lead this effort and collaborate with key stakeholders to achieve a completely food secure Sri Lanka.

K. E. Karunathilake

Secretary

Ministry of Agriculture

Message from the principles of WFP, HARTI and MED

This survey is an in-depth study of food security conditions in the Northern, Eastern and North Central areas of the country. Information on a wide array of food security dimensions – including income levels, expenditure patterns, access to credit, asset ownership, livelihood practices and constraints, food intake, coping behavior, coverage of assistance programs and impact of natural disasters – were collected and analyzed, making it the most comprehensive food security study in Sri Lanka.

The importance of detailed food security analysis cannot be overstated: Given the significant prevalence of food insecurity in the surveyed areas, interventions and policies that are firmly grounded on professional research and practical evidence is a necessity. The Ministry of Economic Development (MED), Hector Kobbekaduwa Agrarian Research and Training Institute (HARTI) and the United Nations World Food Programme (WFP) are committed to continuing the existing tradition of providing policy makers and project implementers with reliable and accurate food security information, analysis and interpretation.

We strongly encourage all decision makers to closely study the findings and act expeditiously to implement the recommendations that the report puts forward. Given the considerable levels of food insecurity in the return areas of the Northern Province and the flood-affected Eastern Province, swift and comprehensive action is necessary to improve livelihoods and move people from food insecurity to self-sufficiency.

WFP has worked in Sri Lanka since 1968, assisting the most vulnerable and food insecure population segments affected by conflict and natural disasters. HARTI has been the lead agricultural research institution since its foundation in 1972 and continues to be the national paragon of excellence in the field of food security analysis. MED, HARTI and WFP would like to reiterate our commitment not only to the study of food security but also to the planning and implementation of relevant programs and projects that contribute to the realization of food security for all.

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We would also like to thank all members of the research team – field team leaders, household interviewers, data entry operators and drivers – for their dedicated work, often under difficult circumstances and at personal inconvenience. We hope that you will find the end product is a good outcome for your hard work.

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Finally, we are grateful for the patience and spirit of collaboration exhibited by all households who participated in the survey as well as the kind community leaders who helped us organize the field work.

It has been our absolute pleasure to enjoy the cooperation and expertise of the more than 130 persons engaged in this survey.

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List of Acronyms

DS	District Secretariat
EMOP	Emergency Operations
FFT	Food for training
FFW	Food for work
GN	Grama Niladhari
GS	Grama Sevaka
HARTI	Hector Kobbekaduwa Agrarian Research and Training Institute
IDP	Internally Displaced Persons
LKR	Sri Lankan Rupees
LTTE	Liberation Tigers of Tamil Eelam
MDG	Millennium Development Goal
MED	Ministry of Economic Development
NGO	Non-governmental organization
NHIES	National Household Income and Expenditure Survey
OFC	Other Field Crops
PRRO	Protracted Relief and Recovery Operation
RDS	Rural development societies
USD	US dollars
VGF	Vulnerable Group Feeding
WFP	United Nations World Food Programme
WRDS	Women rural development societies

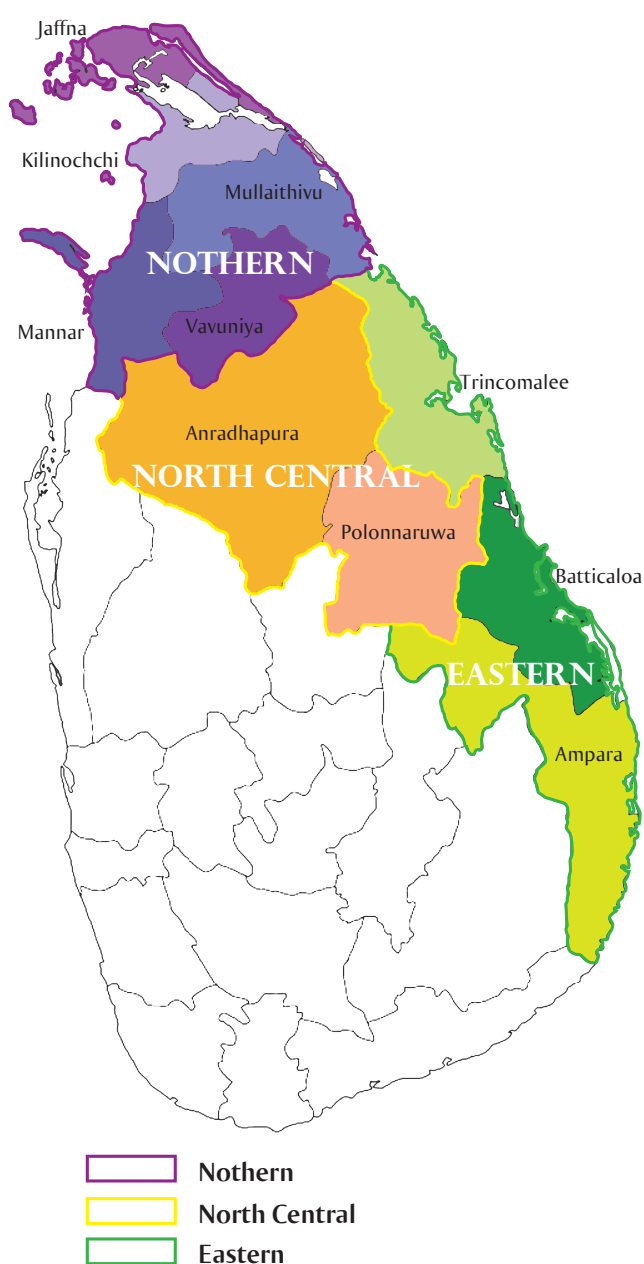
1 Introduction

The World Food Programme – jointly with the Ministry of Economic Development (MoED) and Hector Kobbekaduwa Agrarian Research and Training Institute (HARTI) – conducted a food security assessment in April 2011. The assessment, although covering a larger geographic and thematic area, was a follow-up to similar assessments conducted by WFP in May and November 2010.

The ten districts of Jaffna, Killinochchi, Mullaitivu, Mannar, Vavuniya, Trincomalee, Batticaloa, Ampara, Anuradhapura and Polonnaruwa were covered by the survey. The objective of the assessment was to estimate levels of food security, gauge the degree of livelihood development and provide comprehensive information to help guide future assistance strategy for the remainder of 2011 and first quarter of 2012.

The following chapter describes the methodology applied in this assessment. The subsequent chapters present findings on household income levels and income sources, household assets, expenditure patterns and credit access, food intake, livelihood shocks, flood impact, coping strategies, food security profiling and coverage of assistance.

Figure 1 : Map of surveyed districts



2 Methodology

This survey gathered an extensive set of primary data. Through household and key informant interviews², a broad range of information was collected. Questionnaires covered the thematic areas of basic household information (including member composition), livelihoods and income levels, expenditure patterns, food consumption, coping behavior and assistance and relief provisions.

For assessment results to be geographically disaggregated while retaining precision, stratified sampling was employed, dividing the area into separate study populations. Both WFP and implementing organizations are organized by districts, and therefore geographical stratification along the lines of districts (as opposed to geographical stratification along non-political lines, such as livelihoods zones) was used so that findings would be relatively easier to implement. An exception was made for the two districts – Jaffna and Vavuniya – where there is a large non-urban population that has not returned recently³. For these districts the recently returned population was sampled separately from the more long-term residents⁴. The decision to sample the two resident groups separately was made to test the widely accepted hypothesis that the two population groups exhibit different degrees of food security.

Table 1 : List of study populations

Stratum	Villages sampled	Planned sample size per village (households)	Planned total sample size (households)	Actual total sample size (households)	Number of key informant interviews
Jaffna, households resettled or relocated any time after May 2009	10	15	150	150	10
Jaffna, all other households	10	15	150	151	10
Killinochchi, general population	15	15	225	222	15
Mullaitivu, general population	15	15	225	225	15
Mannar, households resettled or relocated any time after May 2009	10	15	150	151	10
Mannar, all other households	10	15	150	150	10
Vavuniya, households resettled or relocated any time after May 2009	10	15	150	150	10
Vavuniya, all other households	10	15	150	150	10
Trincomalee, general population	15	15	225	225	15
Batticaloa, general population	15	15	225	225	15
Ampara, general population	15	15	225	225	15
Anuradhapura, general population	15	15	225	225	15
Polonnaruwa, general population	15	15	225	225	15
Total	165	15	2475	2474	165

² Key informant data is currently available from all districts except for Killinochchi.

³ For the purposes of this survey, “recently” resettled or relocated households are households which resettled or relocated from 2009 and onwards.

⁴ Recently returned households were sampled separately from other residents also in the district of Mannar. However, as the number of non-recent returnees outside the most urban GNs of the city of Mannar was very small, the statistics for this population is not reported separately.

Within each study population, primary data collection followed a two-stage sample design. Using a sampling frame that included all population centers with the exception of large city centers⁵, GN divisions were drawn randomly, with each GN's probability of selection for inclusion in the sample being weighted to reflect its population size. In the second stage of sampling – at the GN level – households were selected by sampling households with a fixed interval along transect walks of random direction. The randomness of selection, both at the primary and secondary sampling level, assures representational findings and allows this study to make inferences about the overall population in the study areas.

A total of 2,474 households from 165 GN divisions were sampled in this assessment. The data collection period was from 24 March to 1 April 2011, a post-harvest period. The assessment is the largest ever undertaken by WFP in Sri Lanka.

Secondary data from government and non-governmental sources was used for contextual information and triangulation of findings. Important data sources included the crop damage assessment report from the Ministry of Agriculture and the Household Income Expenditure Survey of 2009.

2.1 Survey limitation

The survey was executed applying random selection of locations, at the GN level, with each GN's probability of being included in the study set to be proportionate to its population size. Because of limited resources and time constraints the number of locations sampled, as described above, was limited to 15 to 20 locations per district, depending on the complexity of district population. Given that number of locations, the sampling error is larger than would have been the case if the survey would have sampled a greater number of locations. However, the number of locations sampled falls well within the recommended guidance of 10 locations as per the standard WFP assessment manual⁶. Nonetheless, it is possible that the estimates generated by the sample deviates from the true population parameter and therefore generalizations should be done with care.

The survey covers three very disparate provinces and the causes of food insecurity differ substantially across the ten surveyed districts. In the Northern Province the twenty six-year civil war was the single most important cause of food insecurity. In Killinochchi, Mullaitivu, Mannar, northern Vavuniya and eastern Jaffna many households were displaced during the final fighting of 2008 and 2009 resulting in loss of life, property, assets and livelihoods due to frequent multiple displacements. In the Eastern and North Central Provinces monsoon floods came as a sudden shock beginning in mid-November 2010 and resulting in severe precipitation. In the five worst impacted districts, more than one million people were affected by floods and nearly 400,000 people were temporarily displaced. Because of the substantial differences in the nature and cause of food insecurity across the surveyed provinces, comparisons should be interpreted in the context of each community's individual characteristics and circumstance.

⁵ The most urban GN divisions in the towns of Jaffna, Mullaitivu, Killinochchi, Mannar, Vavuniya, Trincomalee, Batticaloa, Kattankudy, Manunai North, Ampara, Sammanthurai, Kalmunai, Akkaraipattu, New Town (in Anuradhapura) and Thamankaduwa were removed from the sample in order to focus the survey on rural and semi-urban populations.

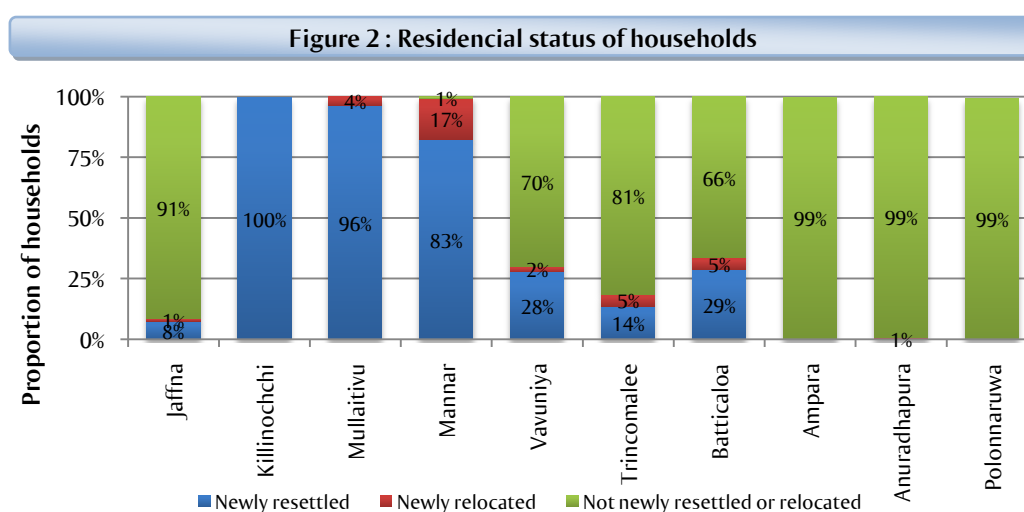
⁶ Emergency Food Security Assessment Handbook, World Food Program, 2008.

3 Displacement and resettlement

Nearly three decades of civil war between the Sri Lankan Armed Forces and the Liberation Tigers of Tamil Eelam (LTTE) ended in May 2009 with the defeat of the LTTE. In the Northern Province – by far the most severely affected area – the war resulted in the deaths of tens of thousands, destruction of private and public property and large-scale displacement. It is estimated that approximately 360,000⁷ persons were displaced in the Northern Province during the entire war period, the vast majority of which (at least 250,000 persons⁸) were displaced in the final stages of the war, in late 2008 and early 2009. The population displaced in the final stage of the war was moved to IDP camps in Vavuniya, Mannar and Trincomalee.

Although the resettlement process had begun already in late 2009, yet the pace of resettlement increased in 2010. Of the total number of displaced persons (360,000), 92 percent⁹ had been resettled by September 2010. Of the population displaced in the final stage of the war, 252,605 persons¹⁰ had left the camps by March 2011. A total of 18,174 persons still remain in IDP camps as of March 2011.

Figure 2 shows the residential status of the surveyed households. This figure presents the proportions of recent¹¹ resettled (returned to place of origin) and relocated (returned to places other than the places of origin) households in the districts affected by the final stage of war. In Killinochchi, Mullaitivu and Mannar, the proportion of newly resettled or relocated households is nearly 100 percent. Approximately one third of the households in Vavuniya and Batticaloa are recent returnees. The vast majority of households in Jaffna were not displaced in the final stage of the war which explains the small percentage of newly resettled/relocated households. The largest proportion of relocated households is found in Mannar.



⁷ Assessment of Nutritional Status and Food Security Levels Among Resettled Families, 2011, MRI, UNICEF and WFP

⁸ The exact number is unknown, however according to the Situation Report (29 Mar 2011, Ministry of Resettlement) it is at least 250,000 persons.

⁹ Assessment of Nutritional Status and Food Security Levels Among Resettled Families, 2011, MRI, UNICEF and WFP

¹⁰ Situation report, 29 Mar 2011, Ministry of Resettlement.

¹¹ “Recently” resettled or relocated households are households which resettled or relocated from May 2009 and onwards in the Northern Province and households which resettled or relocated from January 2007 in the Eastern Province .

Table 2 shows the resettlement patterns in the five northern districts, as the percentage of each district's sample that returned in each month. In Jaffna, early resettlements and most returns to the area occurred in October and November 2009. In Vavuniya, more than 40 percent of households returned during the period from October to December 2009; there were also many households returning in April and July 2010. In Killinochchi and Mullaitivu however, most households returned later. In Mullaitivu, most households returned in mid or end 2010.

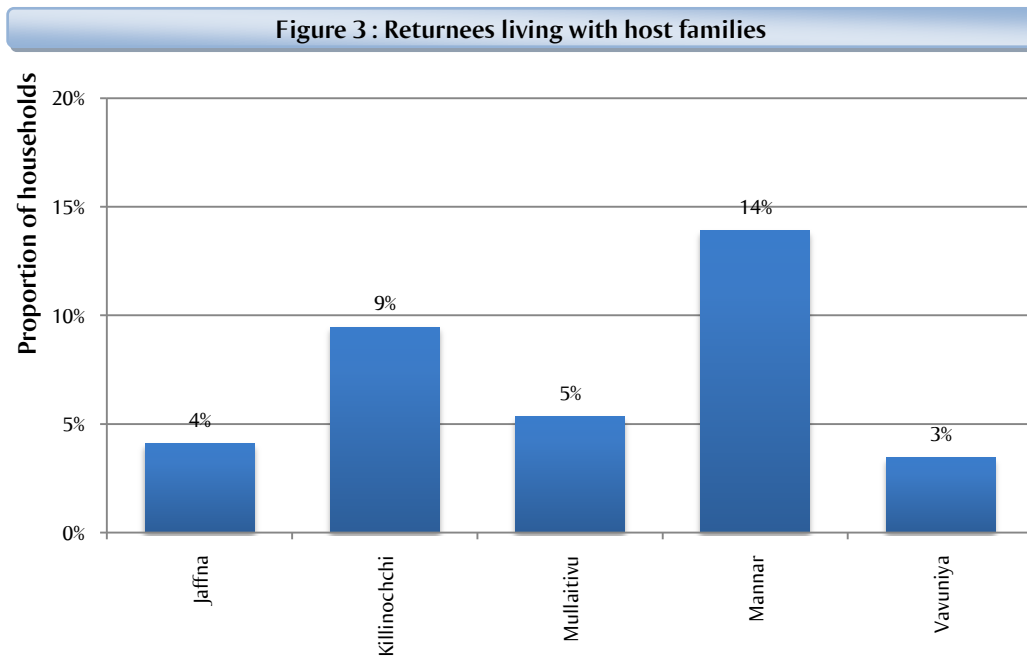
Table 2 : Time of resettlement¹²

	Jaffna	Killinochchi	Mullaitivu	Mannar	Vavuniya
Jan 2009	0%	0%	1%	1%	0%
Feb 2009	0%	0%	0%	1%	1%
Mar 2009	1%	0%	0%	0%	0%
Apr 2009	0%	0%	0%	2%	2%
May 2009	1%	0%	1%	2%	4%
Jun 2009	0%	0%	0%	1%	2%
Jul 2009	0%	0%	0%	0%	1%
Aug 2009	3%	0%	0%	0%	6%
Sep 2009	3%	0%	1%	2%	6%
Oct 2009	40%	0%	4%	7%	14%
Nov 2009	28%	3%	4%	7%	8%
Dec 2009	1%	11%	4%	1%	14%
Jan 2010	1%	1%	4%	2%	7%
Feb 2010	0%	8%	5%	3%	1%
Mar 2010	1%	12%	6%	23%	1%
Apr 2010	0%	6%	12%	4%	11%
May 2010	1%	24%	13%	10%	1%
Jun 2010	1%	12%	5%	2%	1%
Jul 2010	0%	11%	4%	8%	11%
Aug 2010	1%	4%	5%	2%	4%
Sep 2010	4%	4%	10%	10%	0%
Oct 2010	12%	1%	9%	5%	4%
Nov 2010	4%	0%	4%	1%	1%
Dec 2010	0%	1%	4%	3%	0%
Jan 2011	0%	1%	0%	2%	1%
Feb 2011	0%	1%	0%	1%	1%
Mar 2011	0%	0%	0%	1%	0%

Some returnee households still lived with host families at the time of the assessment. The major reason for this was the lack of access to their place of origin. Particularly in Jaffna, several high security zones were established and are still in existence. Moreover, landmines are still common in some areas making living in specific areas very dangerous. Some returnees also did not return to their place of origin because of poor living conditions and inadequate employment opportunities: In many

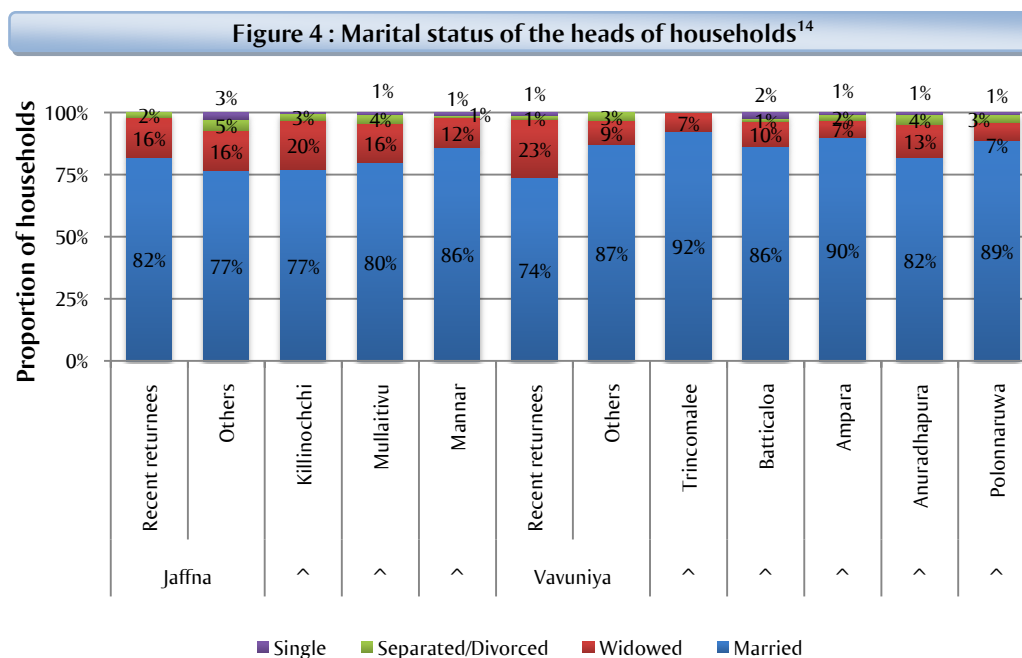
¹² Each column add up to 100%

areas in the North infrastructure is still not been fully rebuilt, access to water and markets is lacking and houses are destroyed. Figure 3 shows the proportion of the total population that lived with host families at the time the assessment was conducted. The population constitutes a small minority in all districts.



4 Basic household information

Figure 4 shows the marital status of the head of the household in the surveyed districts. In all ten districts, most heads of households were married¹³. However, among the recently returned households in Vavuniya, Killinochchi, Mullaitivu and Jaffna, the proportion of widows is large, most likely as a result of male casualties during the three decades of war. Twenty-three percent of the recent returnees in Vavuniya are reported to be widows.

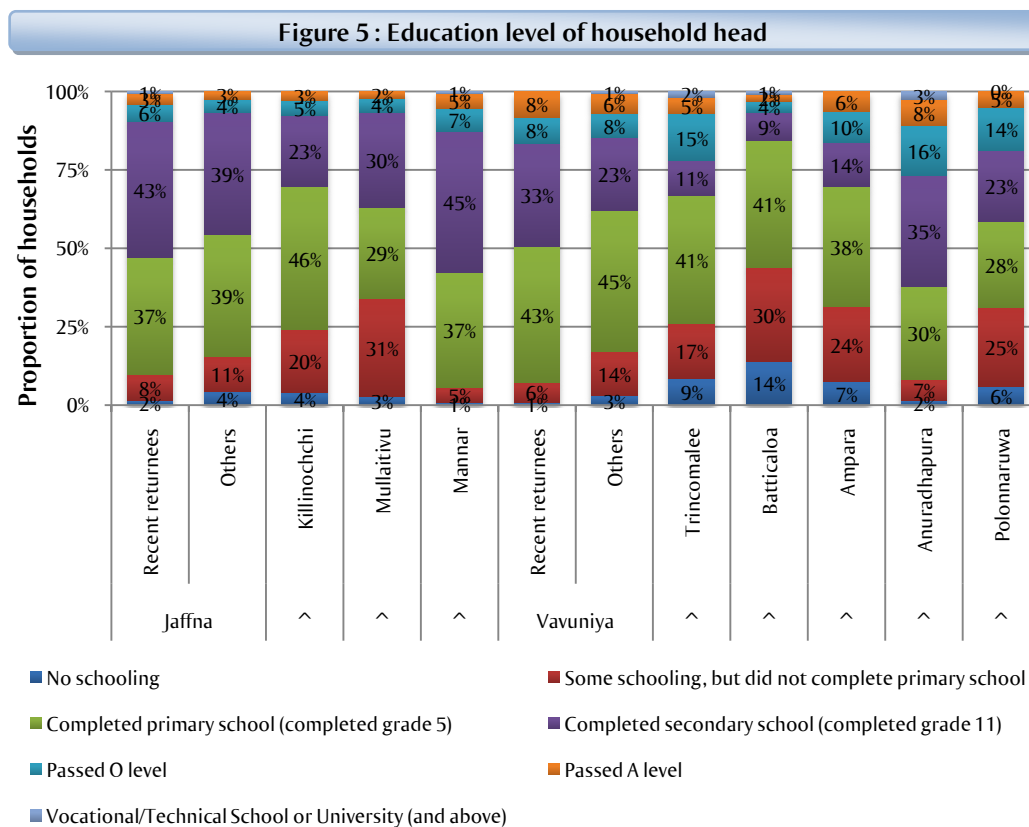


Many heads of households (35 percent) acquired only primary level education; nearly 23 percent acquired secondary education while 5 percent of household heads had undergone tertiary education (including vocational education). More than a third of household heads in Mullaitivu and Batticaloa did not complete primary school education.

The educational level of heads of households was comparatively higher in Anuradhapura, Jaffna, and Mannar districts, presumably with positive implications for employability. The level of education in Jaffna, Mannar and Vavuniya are encouraging given the challenges for the educational system during the time of the protracted war.

¹³ Married is defined as a household heads that are married and have not been widowed or separated.

¹⁴ *Recent returnees* are defined as households returning any time after April 2009. All other persons, whether ever displaced or not, are grouped together into *others*. The same definition – only applicable to Jaffna and Vavuniya – is used for all charts in this paper. See chapter 2 on methodology for a comprehensive explanation about stratification.



The average proportion of disabled household members is high in the Northern Province, especially in Killinochchi, Jaffna, Mullaitivu and Vavuniya. In the Eastern and North Central Provinces a lower percentage of disabled persons was found. Although this assessment did not collect information about the cause of disabilities, it is likely that the war and the lack of health facilities during the last twenty years of the conflict are important explanations for the high rate of disabilities.

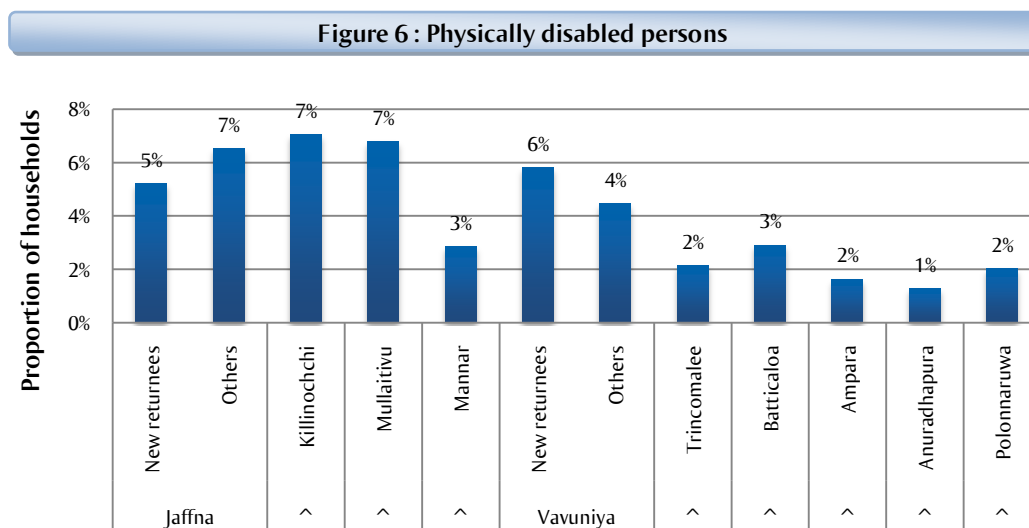
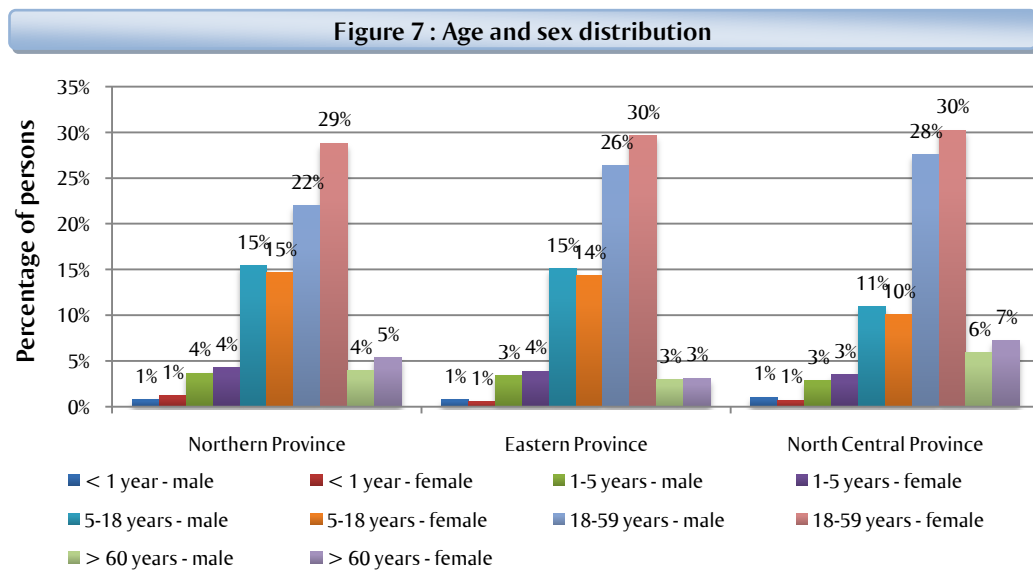


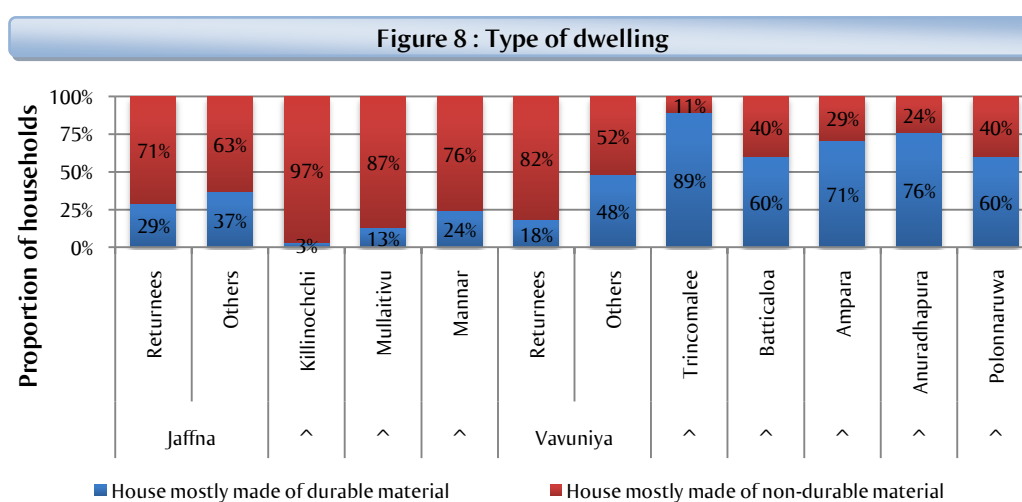
Figure 7 shows the age distribution of the surveyed population. The age distribution exhibit a similar pattern across Provinces. However, it can be seen that the Eastern and North Central populations are relatively older than the population of the Northern Province. Also, the proportion of women in the category 18-59 years is higher than the male category of the same age group; the largest gap between both categories is found in the Northern Province. The population category of 18-59 year olds represents 51 percent of the total population (29 percent women and 22 percent men).



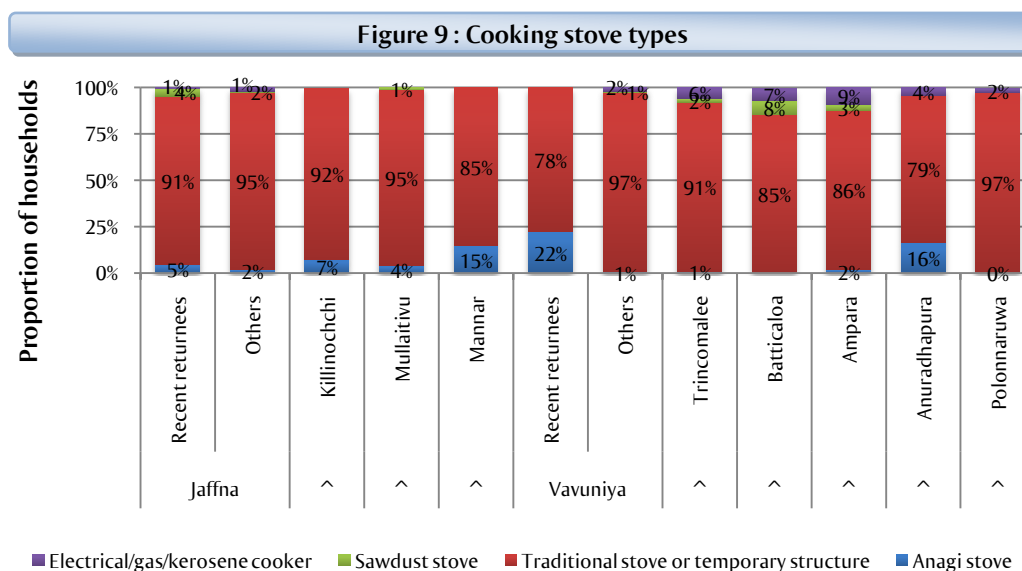
On the whole, the impact of war in the Northern districts can be seen in the presented household information: The Northern Province comprised more widows, a larger proportion of disabled people as well as a smaller proportion of men at the age of 18-59 years. Another important finding is that on average, the levels of education of the heads of households were lower in the Northern and Eastern Provinces.

5 Housing facilities

Most families in the Northern Province live in houses made of non-durable materials. Houses made of such materials are classified as temporary shelters; they may include tents or houses made out of tin sheets, cajan and mud. Killinochchi in particular, exhibits a very large proportion of houses, 97 percent, which are made of non-durable material. Yet, more than 60 percent of households in Mullaitivu, Jaffna and Mannar live in houses made of non-durable materials. In the Eastern and Northern Provinces, the majority of houses are built of durable materials, ranging from 60 percent in Batticaloa to 89 percent in Trincomalee. These results should be seen in the light of the time of the return of displaced people – in Killinochchi and Mullaitivu, most households returned in 2010 while in other districts, many households were already able to return home and establish a living before 2010.



In the Northern Province as well as in the district of Anuradhapura, the promotion and distribution of Anagi stoves is noticeable. In Mannar, Vavuniya and Anuradhapura these are found in about every sixth household. In the other districts, however, the proportion of households using Anagi stoves is minimal.



6 Income and poverty

Before reviewing the household income data collected in the assessment at hand, the findings of the most recent main national poverty study, the National Household Income and Expenditure Survey (NHIES) of 2009, are discussed.

6.1 Background

In the National Household Income and Expenditure Survey, household income refers to income received either in cash (monetary income) or in kind (non-monetary income) by all the members usually living in a household. Therefore, income includes not only wages and salaries received by household members but also other income sources such as in-kind assistance and remittances.

According to the 2009 National Household Income and Expenditure Survey, real household income had increased from year 2002 to 2006/7. However, real income did not increase from 2006/7 to 2009/10 but remain stable. Figure 10 shows that the nominal household income has increased from 12,803 to 36,451 LKR within the last decade (Year 2002 to 2010).

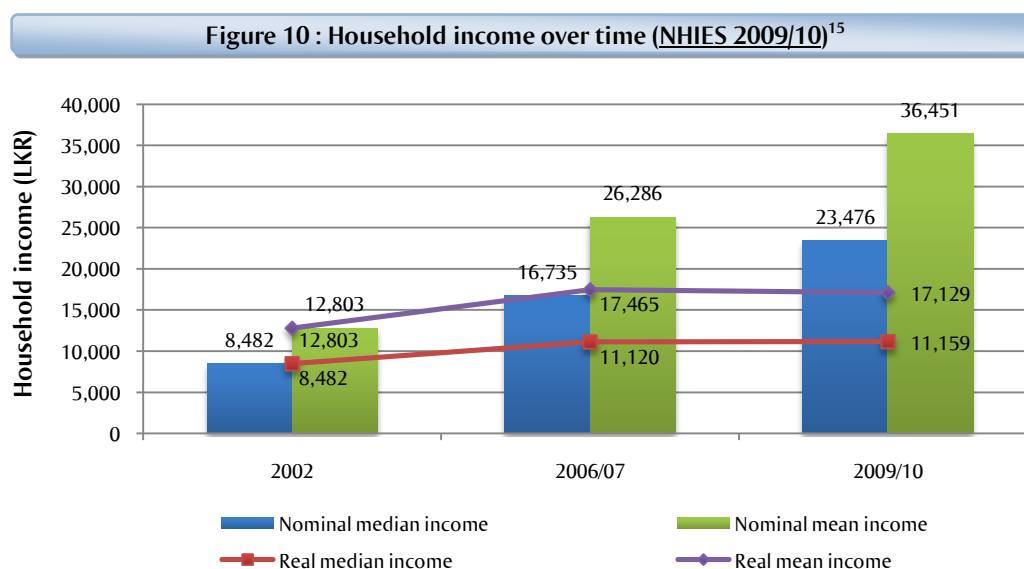
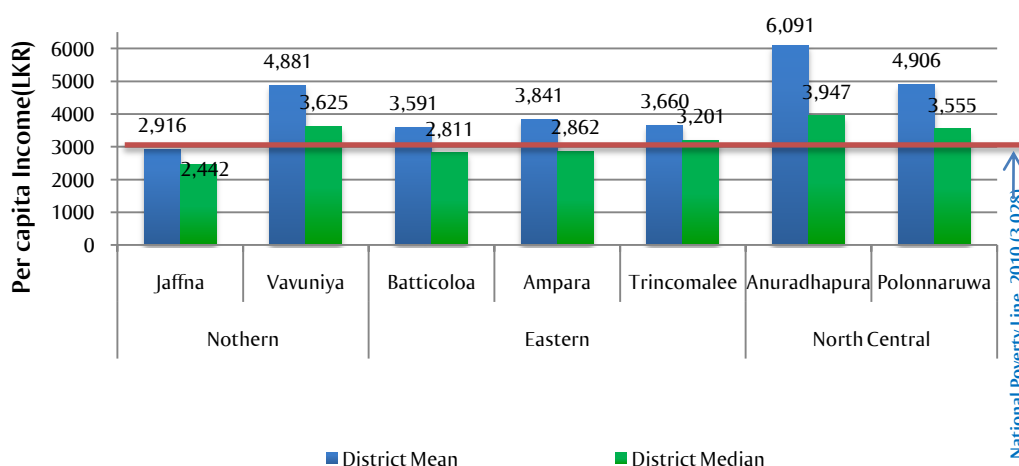


Figure 11 shows per capita income from the 2009 NHIES per district. Median per capita income levels remained below the national poverty line of 3,028 rupees¹⁶ in Jaffna, Batticaloa, and Ampara. In the Anuradhapura and Polonnaruwa districts, and to some extent in Vavuniya district, median income levels were above the poverty line.

¹⁵ 2002 is the base year for real income

¹⁶ The official national poverty line for the NHIES survey period (2009-2010) was Rs. 3,028

Figure 11 : Per capita monthly income by district (NHIES 2009/10)

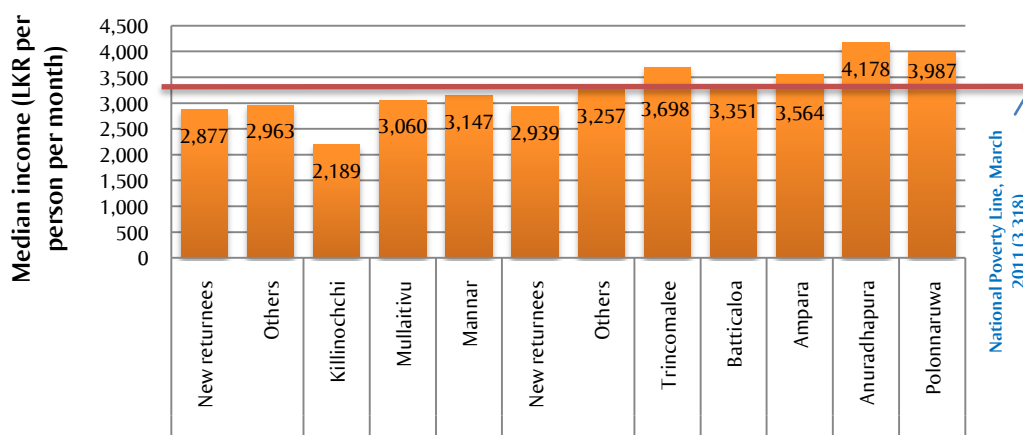


6.2 Survey results

This study has revealed that median income ranged from 2,189 rupees per person per month in Killinochchi to 4,178 rupees per person per month in Anuradhapura. The median income for all study population in the Northern Province fell under the national poverty line of 3,318 rupees¹⁷ per person per month. The median income in the Eastern Province was just above the poverty line and the North Central Province was substantially above. The lowest median income was reported in Killinochchi. The relatively weaker income generating capacity of households in the Northern Province is not surprising given the prolonged and recurring waves of violent conflict affecting loss of lives, displacement and destruction of private and public property. With substantial returns starting in 2010, most households are still in the early recovery stages of livelihoods development.

Comparing nominal median income levels in the NHIES 2009/10 with the present study, there are improvements in Jaffna, Trincomalee, Batticaloa, Ampara, Polonnaruwa and Anuradhapura.

Figure 12 : Median income per person per month



¹⁷ The official national poverty line for March 2011 was Rs. 3,318

As shown in Figure 13, a large proportion of the population in the Northern Province lives below the poverty line. The situation is worst in Killinochchi where 26 percent of all households live below *half* the poverty line. The very high poverty prevalence illustrates the underdeveloped nature of the economy and households' low capacity for income generation.

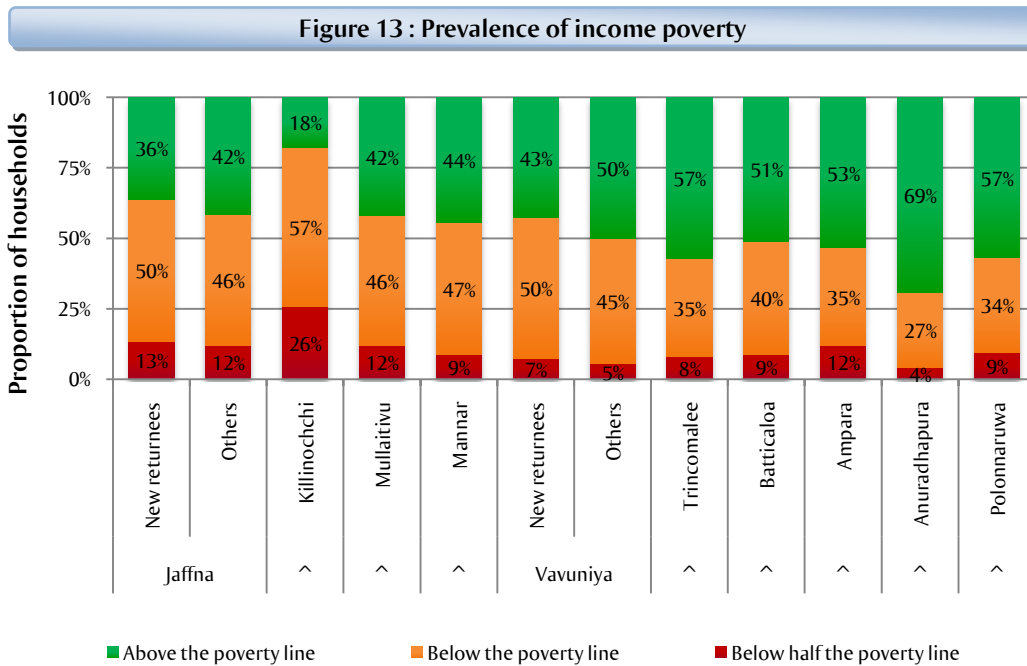


Figure 14 shows a comparison over time of the poverty situation among the returnees in the Northern Province over a period of time. Income levels, although bleak, have improved for the returnee population in the Northern Province compared to survey findings in October 2010. With the exception of Killinochchi, where the proportion of households living above the poverty line declined from 24 to 18 percent, income levels for the returnee populations in the other four northern districts have increased. Although the proportion of the population living above the poverty line has grown substantially, it is important to note that the actual change in absolute levels of income is relatively small. Furthermore, the improvement may be merely seasonal: the October 2010 data was collected in the lean season while the April 2011 data was collected in the relatively better-off post-harvest season. It is therefore difficult to determine if the improvement is a reflection of the time of year the data was collected. It is also possible that this improvement reflects an atypical increase in income, stemming from enhanced livelihood capacities and income opportunities.

Figure 14 : Poverty prevalence trends (returnee households only)

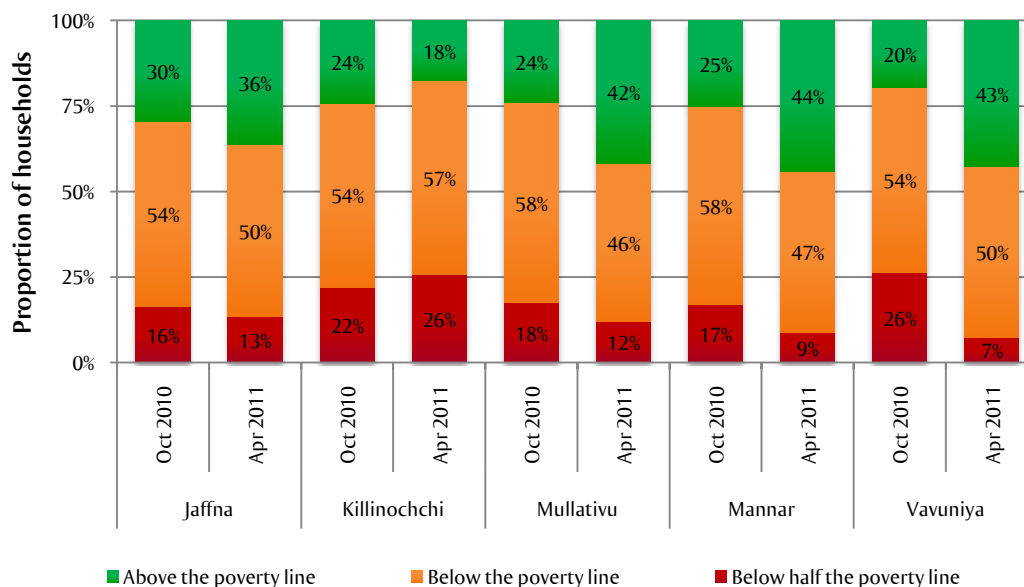


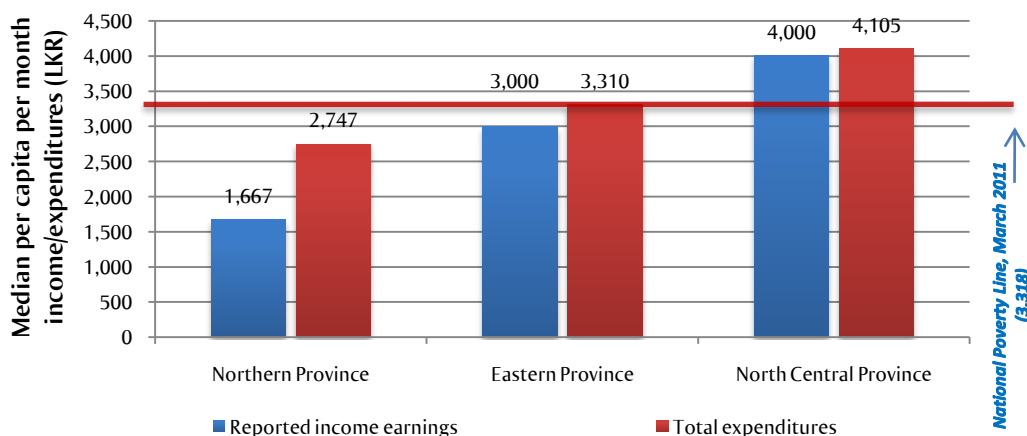
Table 3 : Household median and mean income by household income quintile

Quintiles	Mean	Median
Less than 9,017	6,469	6,783
9,017 - 12,750	10,961	11,033
12,750 - 16,850	14,670	14,483
16,850 - 22,930	19,495	19,070
More than 22,930	36,056	29,137
All groups	17,520	14,483

The above estimates of income levels are based on expenditure data. As is common in poverty studies, households are asked about their expenditures on a wide range of items and services, and on the hypothesis of zero net saving, total expenditure is assumed to be a measurement of income. However, when asked about income earnings, regional patterns arise showing geographical differences in the replies of surveyed households. Although expenditure levels are relatively similar across districts, reported income earning levels are not: As illustrated in Figure 15, the median reported income earnings in the Northern Province is 1,667 rupees per person per month, far below the corresponding levels of 3,000 and 4,000 rupees for the Eastern and North Central Provinces, respectively. Consequently, there is a very large gap between reported income and expenditure levels in the Northern Province.

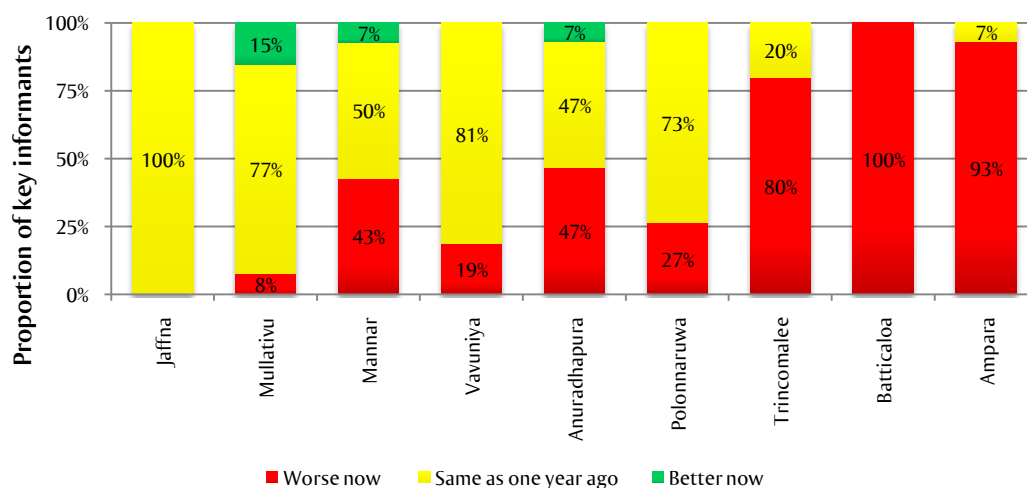
The inability of households to generate enough income to cover essential expenses has resulted in high indebtedness and liquidation of assets. Households' assets ownership and access to credit is further discussed in the Chapters 9 and 10.

Figure 15 : Differences between income and expenditures



Regarding the development of employment opportunities, it is evident that most key respondents did not see improvements from last year to this year. While in the Northern Province, employment opportunities were claimed to have remained unchanged, most key respondents (at least 80 percent) asserted that in the Eastern Province, employment opportunities have worsened. Although no data was collected on the reasons for the change in employment opportunities shown in Figure 16, it is possible – especially given the geographical pattern of the replies – that the negative change is partly a result of the detrimental effects on livelihoods of the major floods in January and February 2011.

Figure 16 : Trends in employment opportunities (comparing 2011 to 2010)



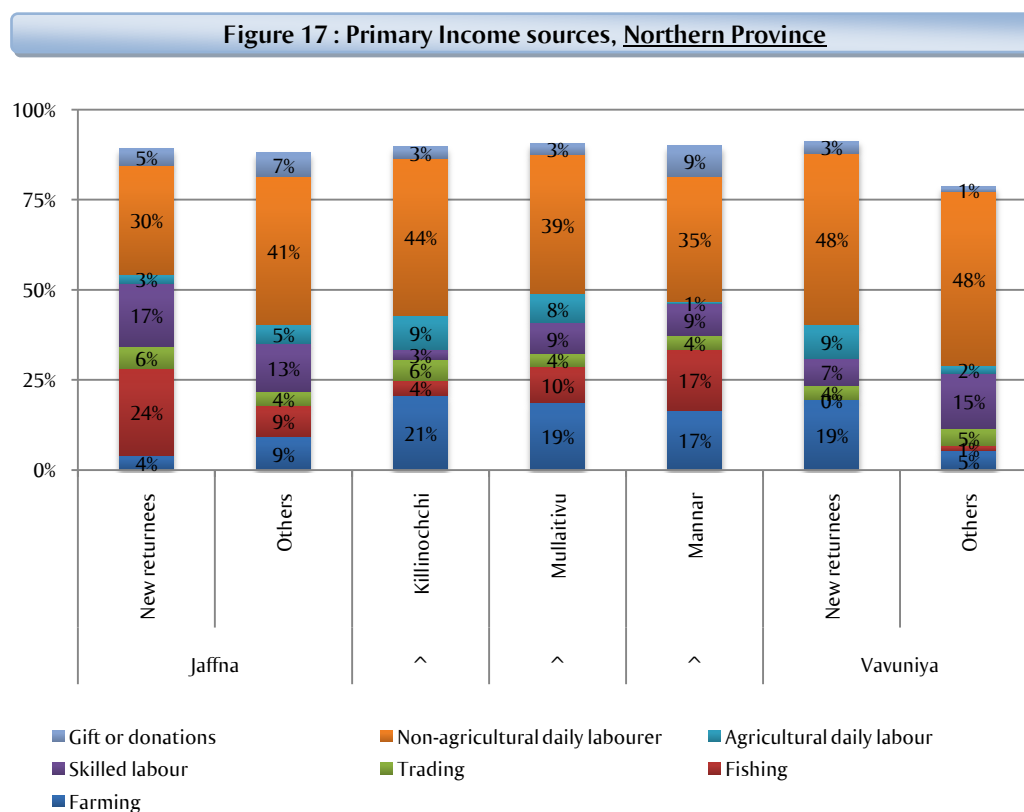
In summary, the income poverty situation in the Northern Province, where a majority of households live below the poverty line, is disconcerting and illustrates the inability of households to generate a sufficient amount of income to cover basic needs. Although less pervasive compared to the Northern Province, poverty is prevalent also in the Eastern and North Central Provinces. The importance of the increases found in nominal income from October 2010 to April 2011 is difficult to estimate, given expected seasonal improvements in income for the same period. Moreover, the major difference between household income levels and expenditure levels in the Northern Province is discouraging, with expenditure levels surpassing income levels by more than 50 percent.

7 Income sources

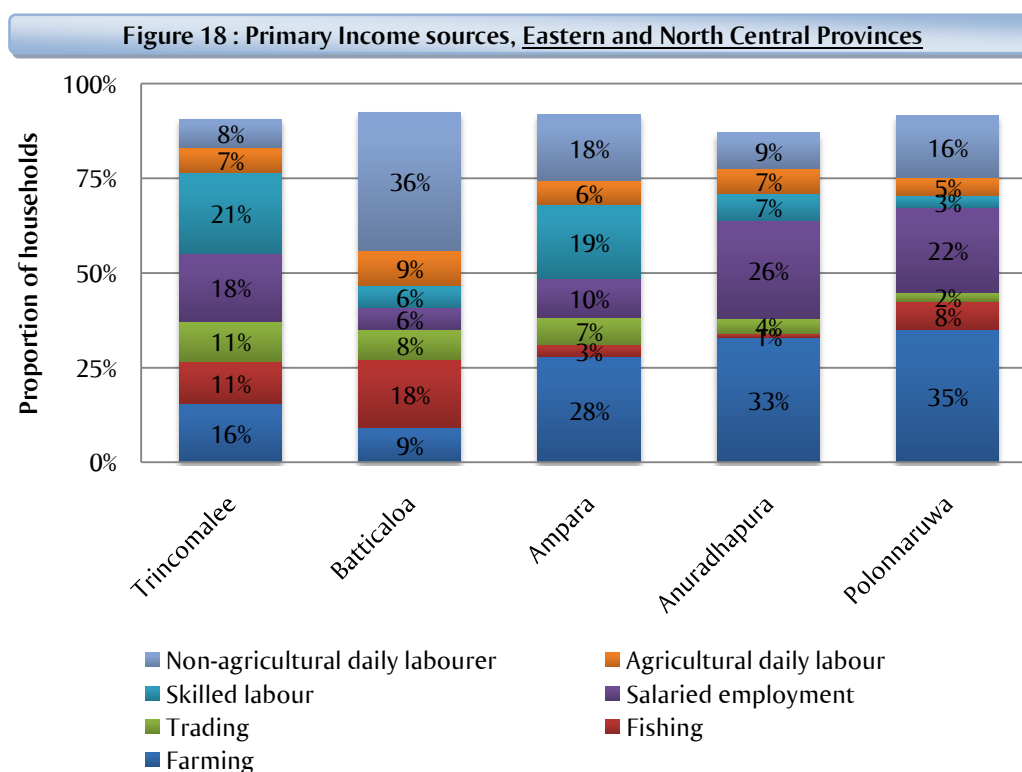
Figure 17 shows the most common *primary* income generation activities in the Northern Province. Non-agricultural daily labor is the most common primary income source across the five districts in the Northern Province. Farming is the second most common primary income in Killinochchi, Mullaitivu, Mannar districts as well as in the Vavuniya district among returnee households.

In Jaffna, skilled labor is the main source of income for 17 percent of households – the highest proportion of all districts, followed by Vavuniya district. A small proportion of households are involved in farming in Jaffna. Fishing is prominent in Jaffna and Mannar districts. Twenty-four percent of the recent returnees in Jaffna claim fishing to be their main source of income. Moreover, Mullaitivu and Killinochchi districts comprise a large proportion of fishing households amounting to 10 percent and 4 percent respectively.

Data gathered in this assessment reveals that gifts and remittances play a very small role in the economy of most households. Only 5 percent of households in the Northern Province report receiving remittances in the last month, and less than 2 percent say that remittances are contributing significantly to the household economy. Thirty-one percent of households say they receive gifts from friends or family within Sri Lanka, but only 5 percent say the amounts are sufficient to be of significant value to the household. The small importance of remittances may be partially explained by the exclusion of major city centers from the sample, as explained in Chapter 2.



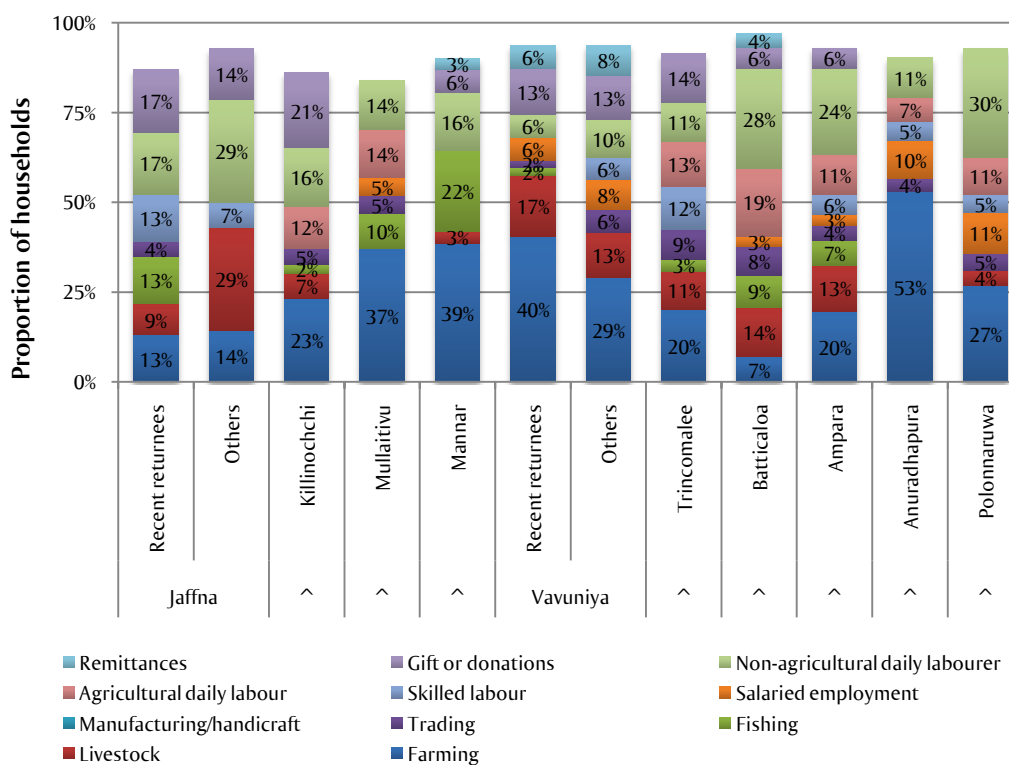
The Eastern and North Central Provinces show a somewhat different pattern of income generation compared to the Northern Province. As illustrated in Figure 18, farming, salaried employment and skilled labor are more important sources of income in these districts. A considerably larger proportion of households engaged in farming in the North Central Province (33 percent in Anuradhapura and 35 percent in Polonnaruwa). Conversely, unskilled non-agricultural daily labor¹⁸ is less common, although still important, especially in Batticaloa. This larger proportion can be explained by a livelihood migration towards non-agricultural labor that took place due to the severe flood impacts. The proportion of households involved in fishing is reported to be 18 percent in Batticaloa and 11 percent in Trincomalee. Similar to the Northern Province, the importance of gifts and remittances in the Eastern and North Central Provinces is also low.



Farming is the most popular secondary income source in the North Central Province and all Northern districts except for Jaffna. Non-agricultural daily was labor is the second most common secondary income source, followed by livestock rearing such as backyard farming. Approximately one third of the general population in Jaffna keeps livestock as their second main source of income. Very few households reported remittances as their secondary income source in all the districts.

¹⁸ Unskilled non-agricultural daily labor encompasses a wide range of income activities, all of which are relatively irregular (as opposed to salaried employment), for example construction of buildings and roads, loading and unloading, cleaning, services (restaurants, hotels etc.), mining, metal crushing, mills and factory work.

Figure 19 : Secondary income sources



In conclusion, the fact that a very large proportion of the population in the Northern Province and Batticaloa are engaged in generally low-paying, unskilled and uncertain daily labor are of some concern.

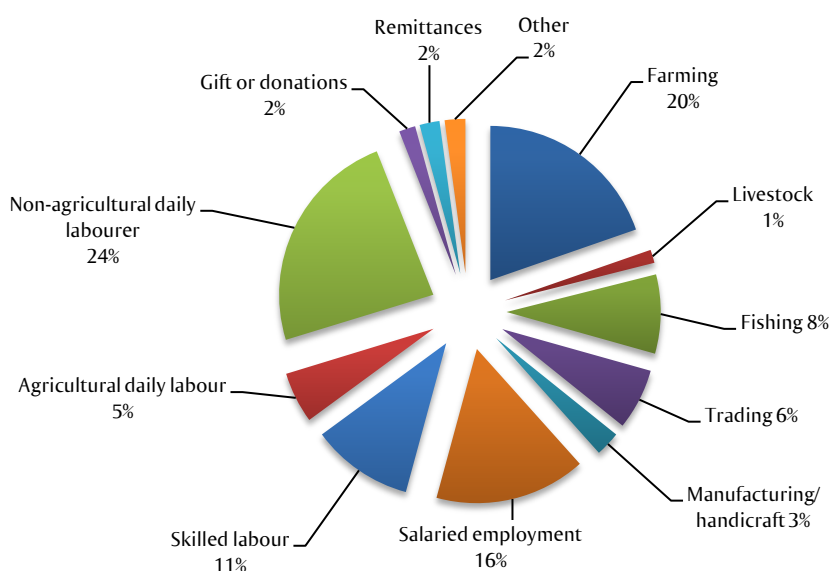
The size of the household workforce plays a major role in generating income and the number of income receivers is positively correlated with the total household income¹⁹. The average number of income receivers is fairly constant across districts, with district averages ranging from 1.0 to 1.4. Comparatively however, the average number of income receivers is lower in Killinochchi, Mullaitivu, Jaffna, Vavuniya, Mannar and Ampara while it remains higher in the North Central Province.

7.1 Economic breakdown by sector

When summing up all household income and calculating the relative contribution to the overall economy by each income source, it is shown that non-agricultural daily labor accounts for the largest share of the economy in all three provinces. Twenty-four percent of all income is generated by non-agricultural labor. The second largest income source is farming which accounts for 20 percent of all generated income, followed by salaried employment and skilled labor. Although many households possess livestock, it only accounts for 1 percent of overall income across the districts.

¹⁹ The correlation amounted to 0.116 at $\alpha < 0.05$.

Figure 20 : Economic breakdown by sector



7.2 Farming

Farming is common in all the three provinces. However, the proportion of farming households is larger in Vanni²⁰, the district of Ampara, and the North Central Province. Farming is of less importance as an income source in Jaffna and Batticaloa.

7.2.1 Paddy, highland and home gardening

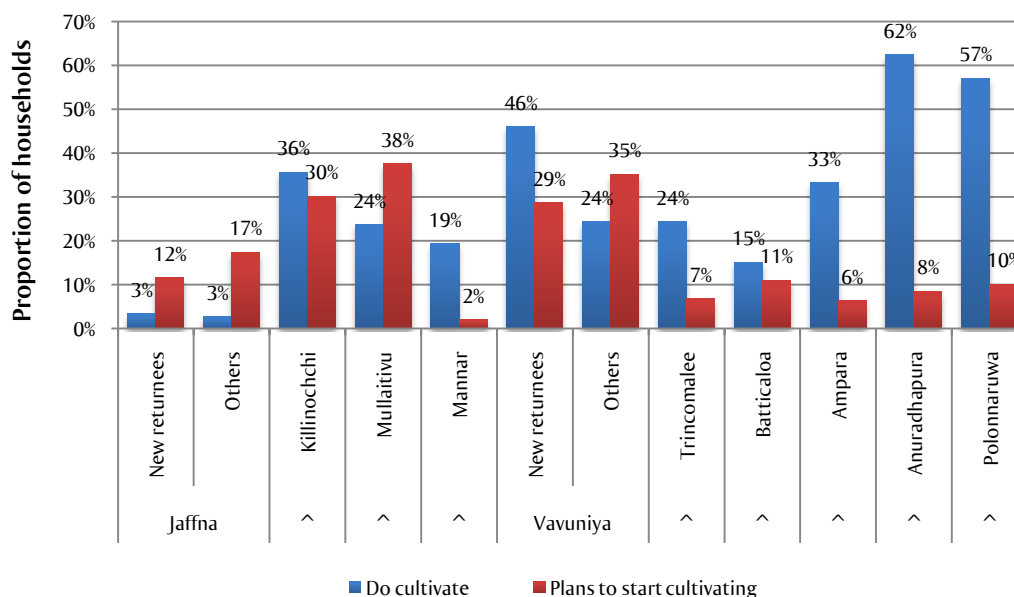
The survey area comprising the Northern, Eastern and North Central Provinces mainly belongs to the dry agro-ecological zone of Sri Lanka. Dry zone agriculture is mainly done under two main seasons of *yala* (April to September) and *maha* (October to March). Paddy is the main seasonal crop in Northern, Eastern and North Central Provinces of Sri Lanka. The cultivable paddy land coverage in these three districts is around 400,000 hectares. The *maha* season is the major paddy cultivation season for all three provinces. Cultivation in the *yala* season can be only done with the help of irrigation facilities and therefore cultivation in this season is limited. The total cultivated area of paddy during the *maha* 2010/11 season in these three provinces was reported as 380,160 hectares. However, the monsoon floods badly affect paddy mostly at the flowering and harvesting stages which resulted in a 23 percent loss of gross expected harvest²¹. Floods are discussed in more detail in the section on Flood impact.

Figure 21 shows the proportions of household already growing paddy and who want to start paddy cultivation. Paddy cultivators account for the biggest share of the total population in Vavuniya, Anuradhapura and Polonnaruwa. The smallest proportion of paddy cultivating households is found in the Jaffna and Batticaloa districts. A considerable proportion of households in Killinochchi, Mullaitivu and Vavuniya plans to start paddy cultivation.

²⁰ Vanni is a geographical area composed on the districts of Killinochchi, Mullaitivu, Mannar and Vavuniya – all districts in the Northern Province, except for Jaffna.

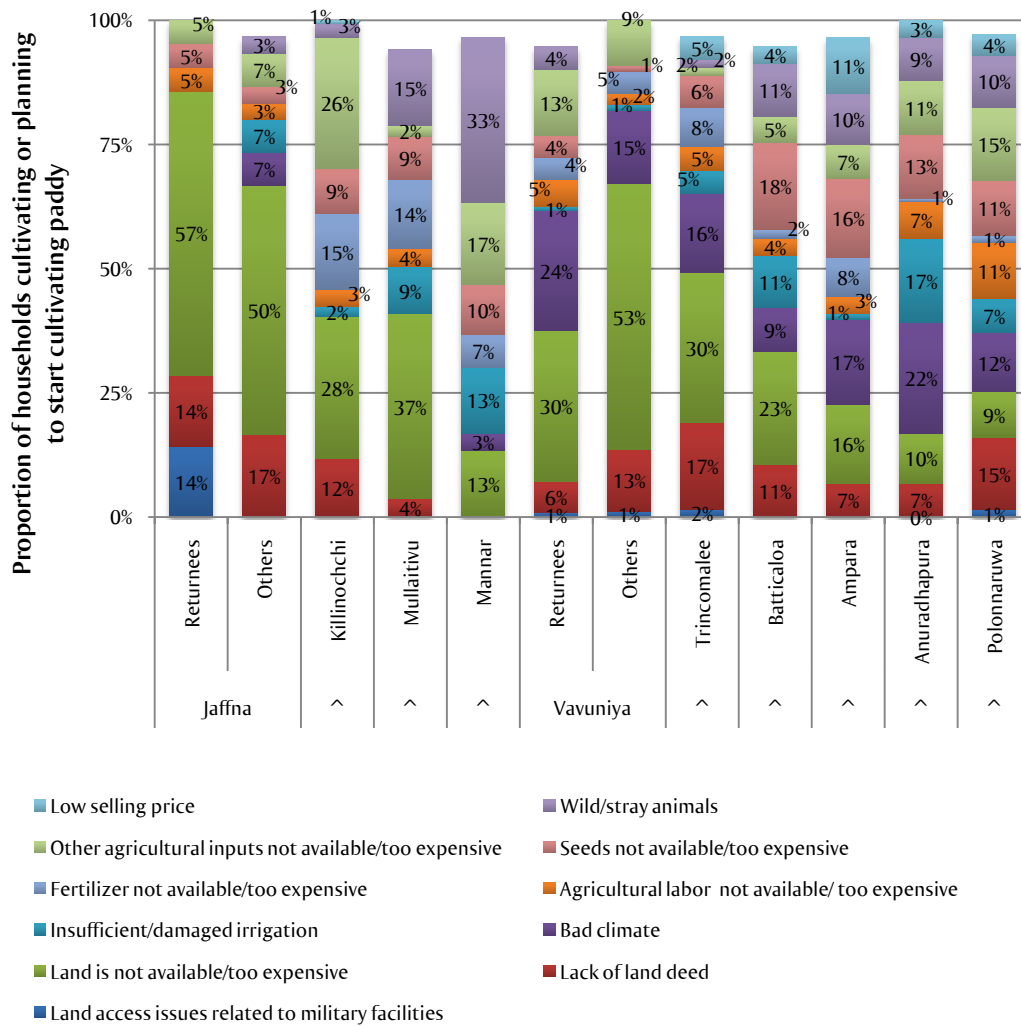
²¹ Source: Socio Economic & Planning Centre, Department of Agriculture

Figure 21 : Paddy cultivation



With respect to paddy cultivation constraints, many households in the Northern and Eastern Provinces (in particular in Jaffna and Vavuniya) that cultivate or plan to start cultivating paddy perceived the non-availability and high price of land as the biggest constraint. In the North Central and Eastern Province as well as in Vavuniya more than 10 percent of households reported adverse climate to be the main obstruction, while in Jaffna 14 percent said high security zones were the biggest constraint to paddy cultivation.

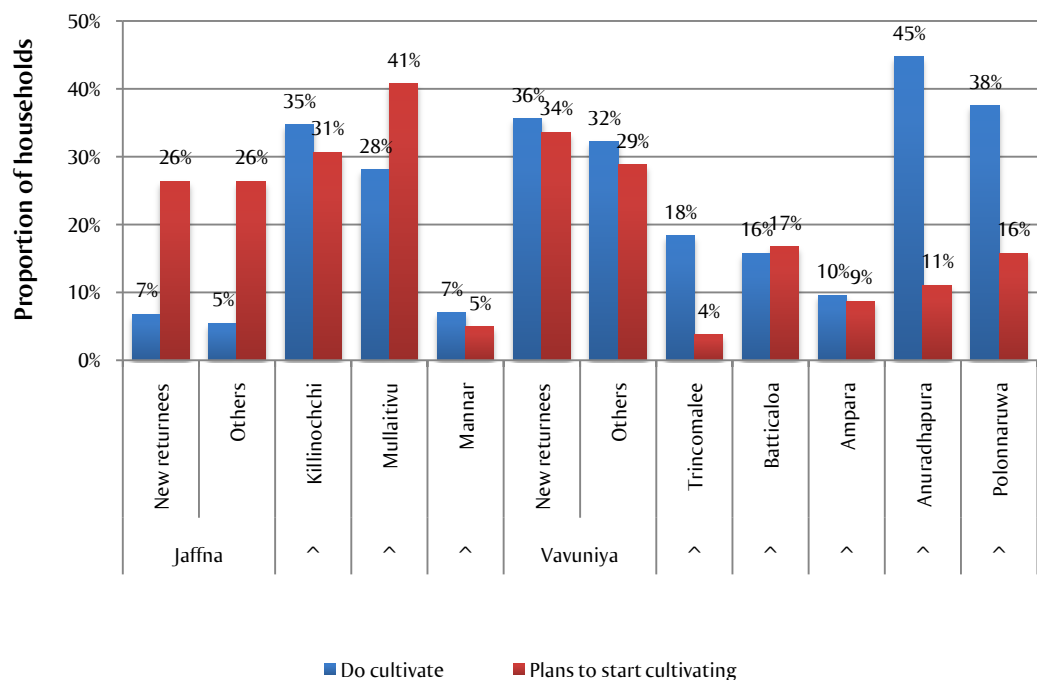
Figure 22 : Most important constraints to paddy cultivation²²



In addition to paddy, highland and home garden cultivation are important. Figure 23 shows the proportion of households that cultivate or want to cultivate highlands. Anuradhapura, with 47 percent, has the largest proportion of households engaged in highland cropping. Highland cropping is more prevalent in Killinochchi, Mullaitivu and Vavuniya than the other survey areas, with the exception of Anuradhapura. In all districts, the proportion of households that cultivate highland is smaller than the proportion of households that cultivate paddy, with the exception of Jaffna. Additionally, a large proportion of the population in Jaffna, Vavuniya, Killinochchi and Mullaitivu wants to start highland cultivation.

²² Households were asked for the single most important constraint to paddy cultivation.

Figure 23 : Highland crop cultivation



Regarding the major obstacles to highland cultivation, many households already cultivating or planning to start cultivating highlands, reported that land availability is too low or land is too expensive. In Ampara, 50 percent of households reported that seeds are not available or are too expensive. Fifty percent of households in Mannar claimed that other agricultural inputs are not available or are too expensive. Moreover, especially in Mannar, one third of households asserted that the insufficient or damaged irrigation systems limited their cultivation. For more than 10 percent of households in the districts of Jaffna, Killinochchi, Trincomalee and Anuradhapura, the major constraint was the lack of land titles.

Figure 24 : Most important constraint to highland cultivation

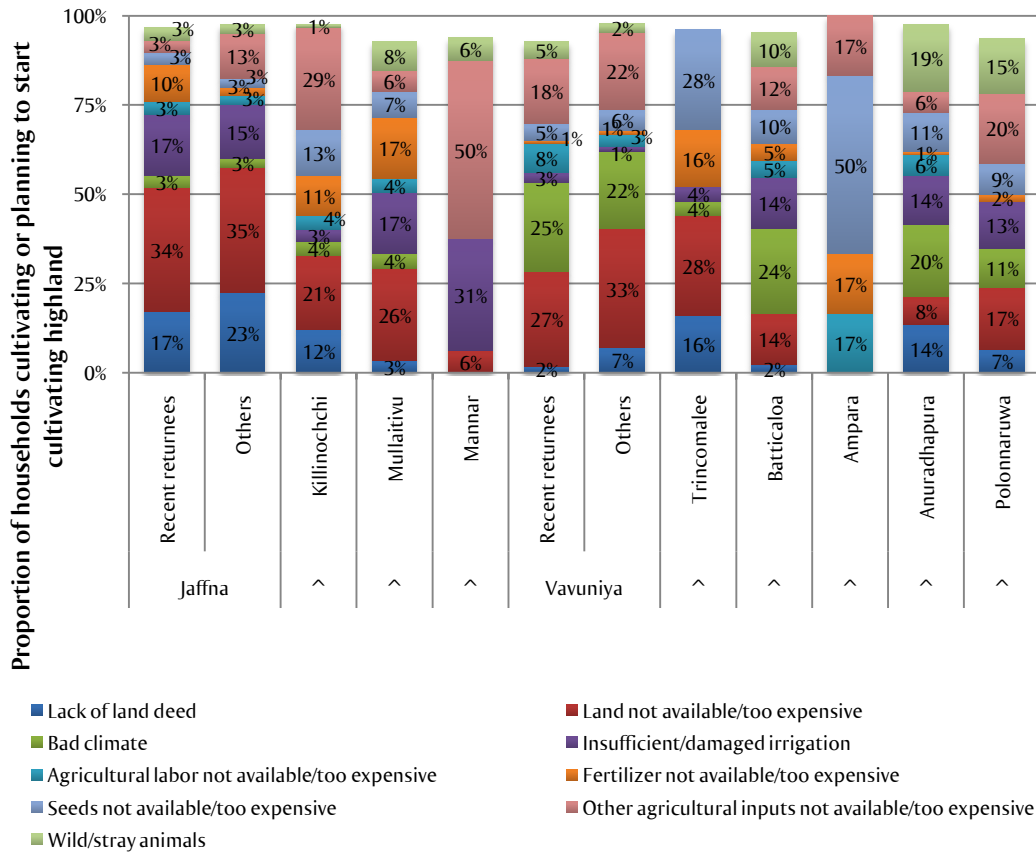
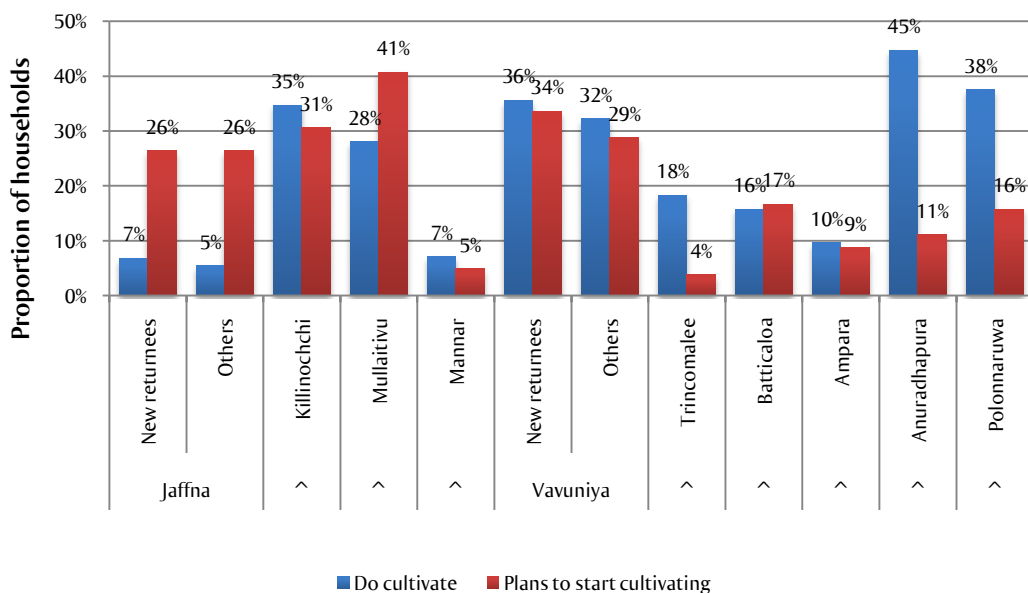


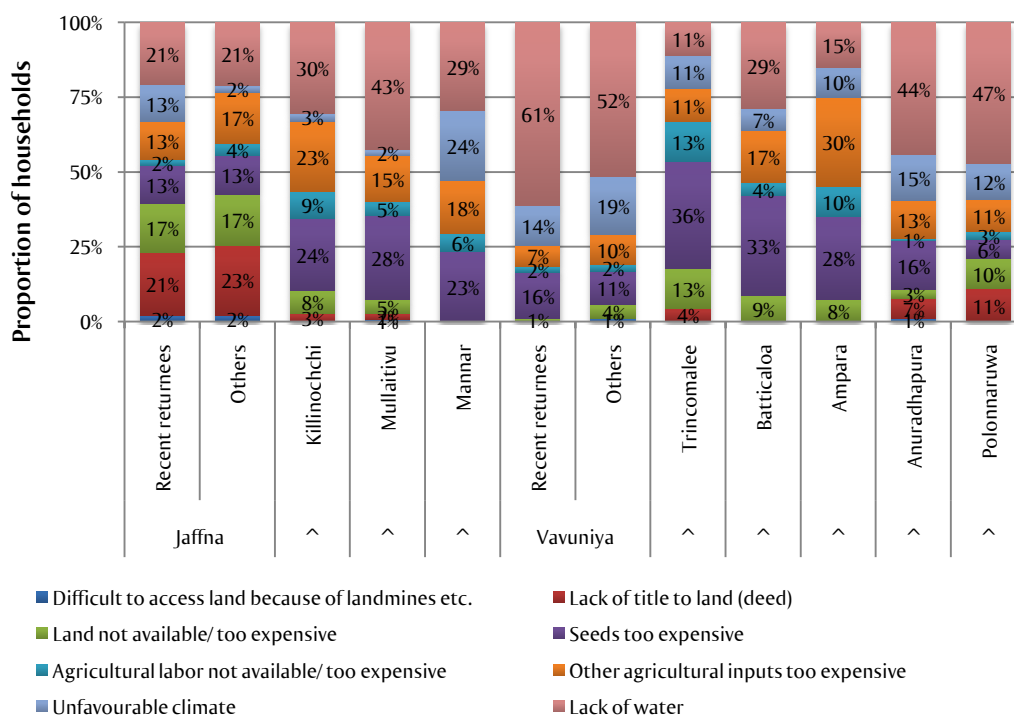
Figure 25 shows the proportion of households that already cultivate home gardens as well as the proportion of households that plan to cultivate home gardens. Home gardening was most common in Killinochchi, Mullaitivu, Vavuniya, Anuradhapura and Polonnaruwa, among 28-45 percent of households. Large proportions of households in Jaffna, Killinochchi, Mullaitivu and Vavuniya (26-41 percent) plan to start cultivating home gardens. Home gardening appears to be of least interest to the population in Mannar and Ampara.

Figure 25 : Home gardening



When asked about the major constraints to home garden cultivation, a large proportion of households cultivating or plan to start cultivating home gardens in all districts indicated the shortage of water as a major obstacle. Furthermore, in Vanni (except for Vavuniya) and the Eastern Province, more than 20 percent of households claimed that seeds were too expensive. In Jaffna, more than 20 percent stated that the non-availability of deed restrained their cultivation.

Figure 26 : Most important constraint in home garden cultivation



Similar results to the ones presented from the household survey were also provided by key respondents from the three provinces. Key respondents explained that for land owning farmers, the shortage of agricultural inputs or higher input prices were the main constraint across all the regions in the Eastern and North Central Provinces. More than 75 percent of the clusters in Polonnaruwa and 50 percent of the clusters in Trincomalee mentioned that the high cost of production thwarted farming activities. Key respondents indicated the high prices of pesticides, machinery and labor as constraints. In Batticaloa, key respondents asserted that floods were the main constraint for land owning farmers. In addition, damage by wild animals encroachments (especially by wild elephant), lack of irrigation during the *yala* season, marketing problems and high costs of production were other common factors that contributed to the impediments in the Northern and North Central Provinces.

The shortage of seeds and tools were perceived to be the main constraints faced by landowning farmers in the Northern Province, especially among the recent returnees in Mullaitivu, Jaffna and Vavuniya. Furthermore, the climate change also proved to be a major constraint in Vavuniya and Mannar.

In the case of land tenancy, informants indicated different problems: Land related issues; in particular the high rental fees and the non-availability of lands for tenancy were the most common issues. Batticaloa and Ampara depicted the most alarming situation because the majority of the clusters mentioned that tenant farmers would not be able to pay back their rent due to the harvest losses. These harvest losses were mainly due to the damage from floods: for instance, most of the harvest had been lost in Mullaitivu and thus the paying back of loans and the tenancy rents are major concerns in the area.

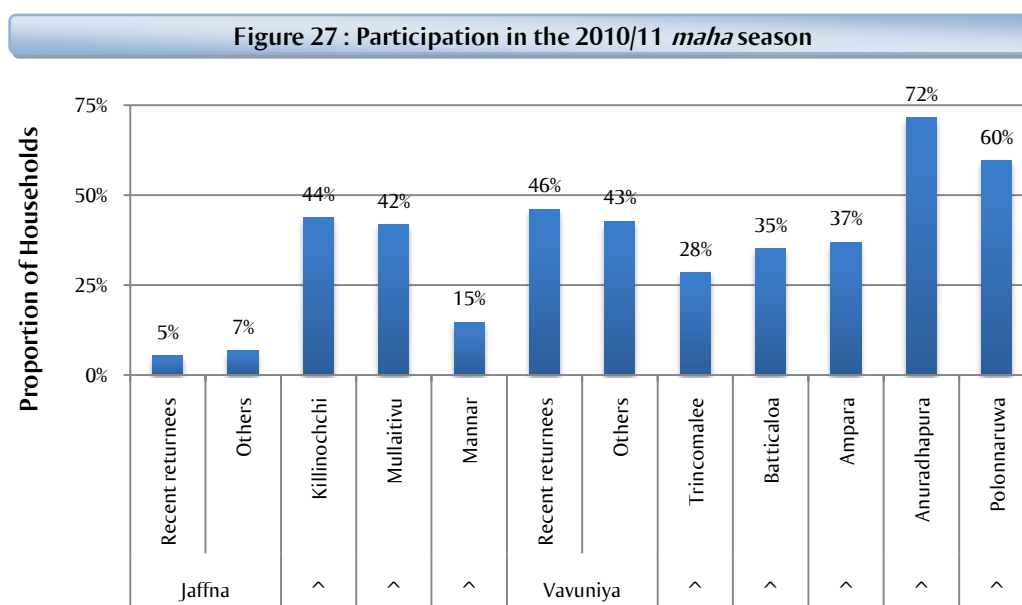
Wild animal threats also seem to be problematic in Polonnaruwa and Batticaloa. The shortage of water during the *yala* season in the district of Anuradhapura is also a cause for concern.

According to the key informant discussions, it was found that paddy is the most important crop in all districts except for Jaffna. In Jaffna, paddy farming was less common than in other districts because land was still not available or too expensive. This can also be seen as a possible reason why most farmers in Jaffna only undertook subsistence farming and had not established profitable farming businesses.

Highland cultivation was mainly undertaken in the Northern Province as well in as Anuradhapura while home gardening seemed equally common in all districts. Major constraints to home gardens included the shortage of water and high expenses for seeds, especially in the Eastern province where a high proportion of households claimed that seeds are too expensive to cultivate home gardens. Despite the given constraints, in all districts, Jaffna in particular, a high proportion of households expressed their desire to start cultivating home gardens.

7.2.2 *Maha* and *yala* participation

All surveyed households were asked about their participation in the 2010/11 *maha* season. The North Central Province is reported to have had the largest proportion of *maha* season cultivating households compared to the other Provinces. Seventy-two percent and 60 percent of the households were involved in *maha* season cultivation in the Anuradhapura and Polonnaruwa districts respectively. Overall, nearly 40-45 percent of returnees have cultivated during the last *maha* season; returnee households in Jaffna are an exception to this as a very small proportion of household participation was reported. Figure 27 shows the proportion of households engaged in the last *maha* season cultivation.



The proportion of households that cultivated in the 2010 *yala* season and the proportion that intends to cultivate in the 2011 *yala* season are shown in Figure 28. Only the districts of Jaffna, Killinochchi and Mannar have a negligible proportion of households reporting participation in the 2010 *yala* season. Cultivation in this season was the most extensive in Polonnaruwa and Anuradhapura, but also common in Ampara. In Anuradhapura, Polonnaruwa, Mullaitivu, Vavuniya and Killinochchi – the districts with a sizable population intending to participate in the 2011 *yala* – this proportion ranged between 37 percent and 57 percent. Meanwhile, Jaffna reported the smallest proportion of households planning to cultivate in the 2011 *yala* season. Particularly noteworthy is how much larger the proportion of households that intend to cultivate the 2011 *yala* is compared to the proportion that cultivated the 2010 *yala*; in Killinochchi, Mullaitivu and Vavuniya the very large difference is indicative of a re-establishment of agricultural livelihoods.

Figure 28 : Cultivation in 2010 *yala* season and intention to cultivate the 2011 *yala* season

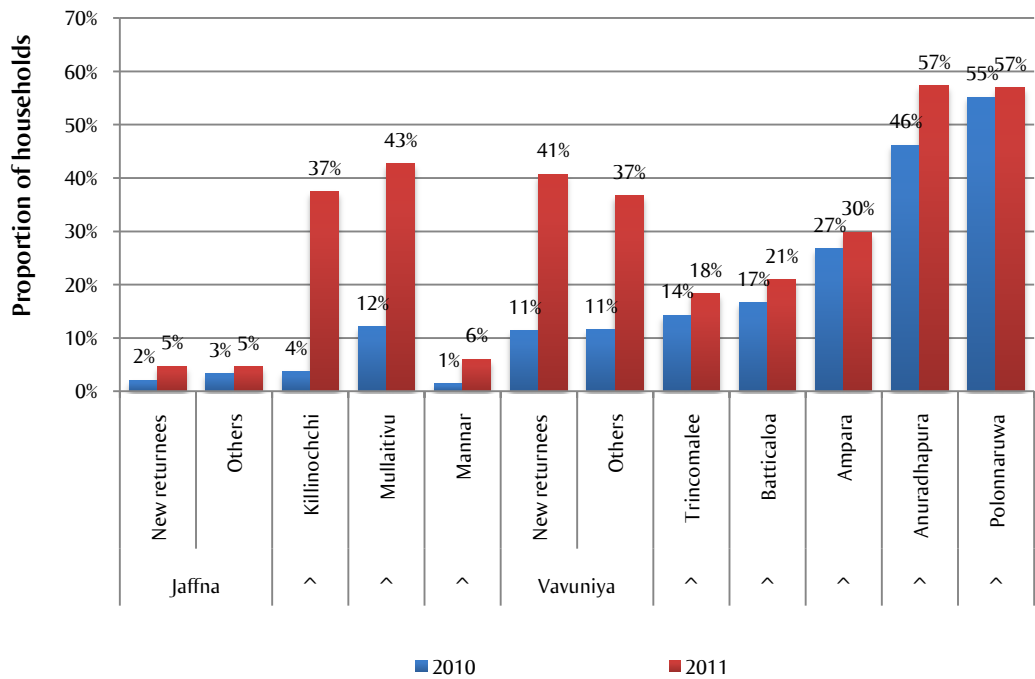
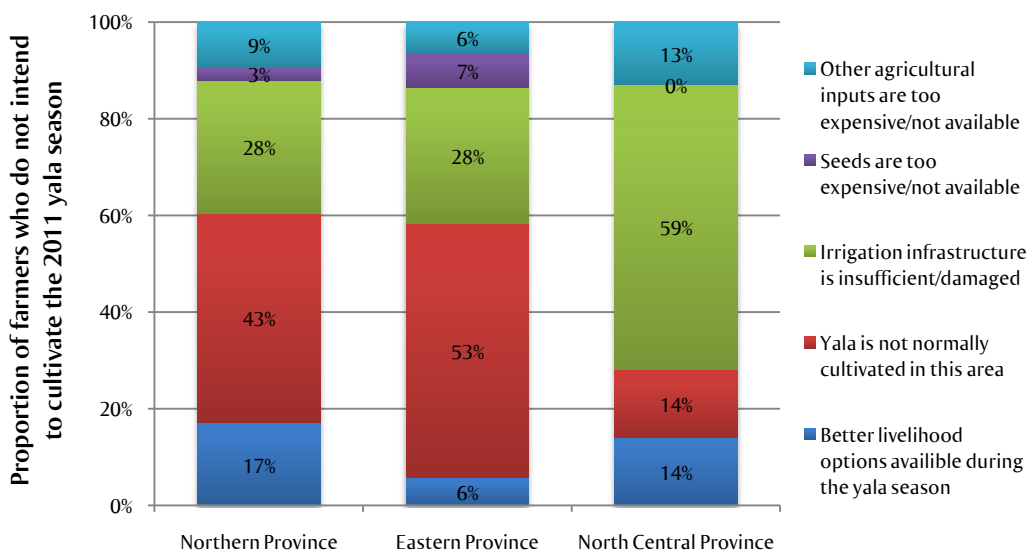


Figure 29 presents the different reasons why some farming households did not plan to cultivate the 2011 *yala* season. The most common explanations are that *yala* is not normally cultivated and that irrigation facilities are insufficient or. In addition, some households reported that inputs that agricultural inputs, including seeds, were unaffordable or unavailable.

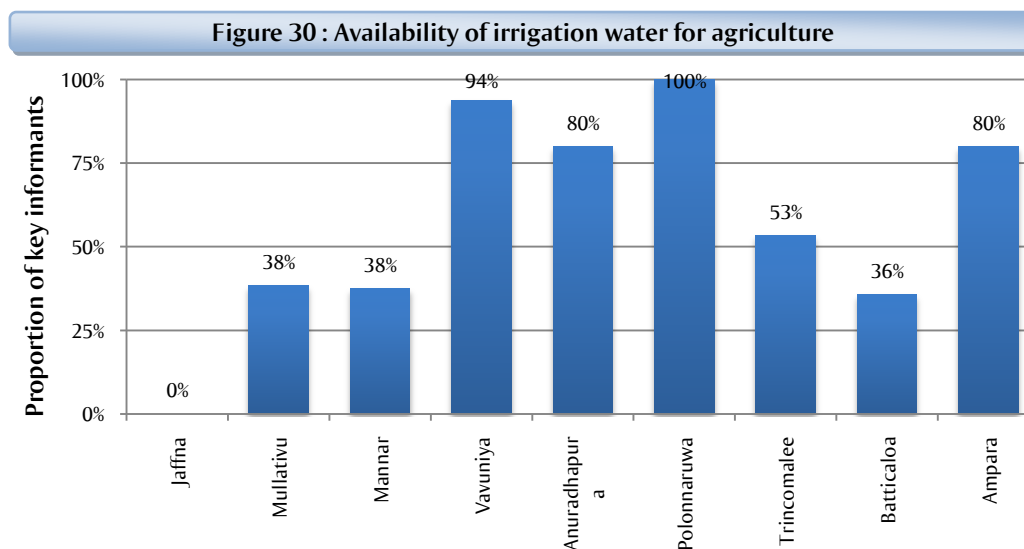
Sustaining rain-fed agriculture without irrigation facilities is impossible in the dry zone of Sri Lanka during the *yala* season. Therefore, it is common practice to skip the cultivation during this season in some areas of the dry zone. More than 50 percent of households in all districts in the Eastern and Northern Provinces have asserted that they usually do not cultivate during the *yala* season.

Figure 29 : Reason for skipping cultivation in the 2011 *yala* season

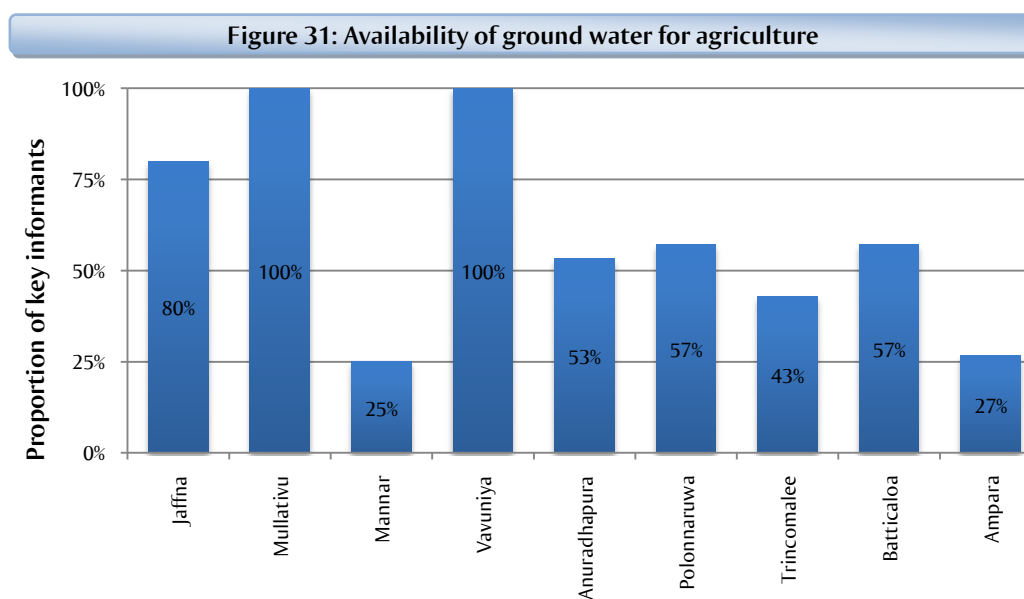


7.2.3 Water availability

The extent of cultivation relies on the access to water. According to key informant interviews, irrigation water was most widely available in Polonnaruwa, Vavuniya, Anuradhapura and Ampara. Irrigated cultivation seemed less possible in Jaffna and irrigation seemed limited in Mullaitivu, Mannar and Batticaloa.



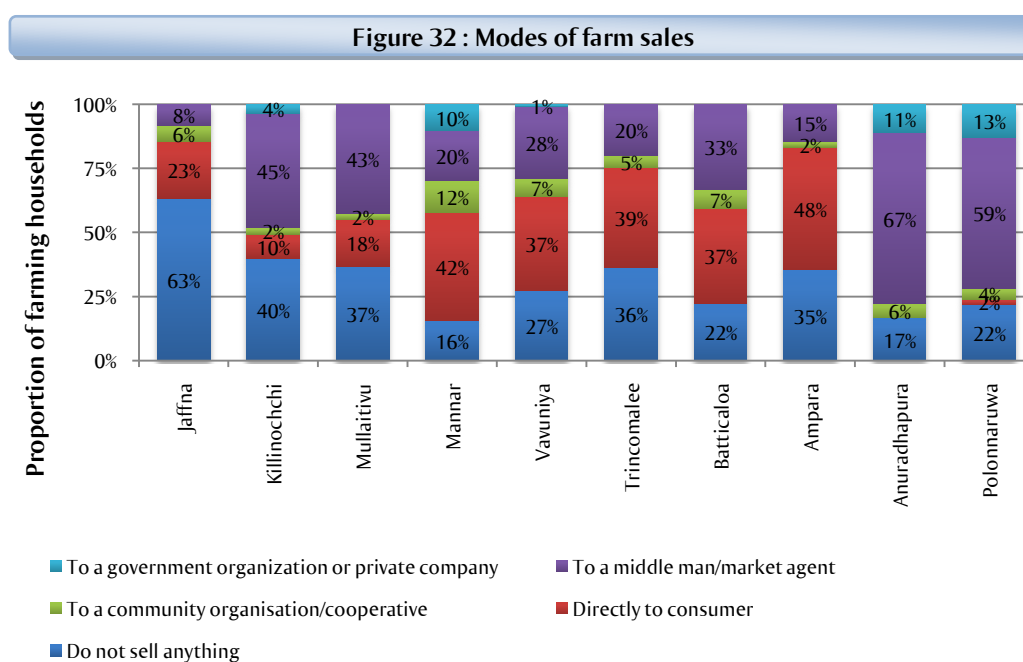
Simultaneously, 80 to 100 percent of key respondents in Mullaitivu, Vavuniya and Jaffna mentioned that ground water is available for agriculture. Ground water seemed less available in the Eastern and North Central Provinces.



7.2.4 Sale of farm produce

In all districts, many farming households undertake subsistence farming and do not sell their products. Similar to livestock owners, the largest proportion of subsistence farmers is found in Jaffna – of all farmers in the district, 63 percent were subsistence farmers. This proportion ranged between 35 and 40 percent in Killinochchi, Mullaitivu, Trincomalee and Ampara. These findings could imply that farming is often considered as an activity to guarantee food supply to households but is not an important source of cash.

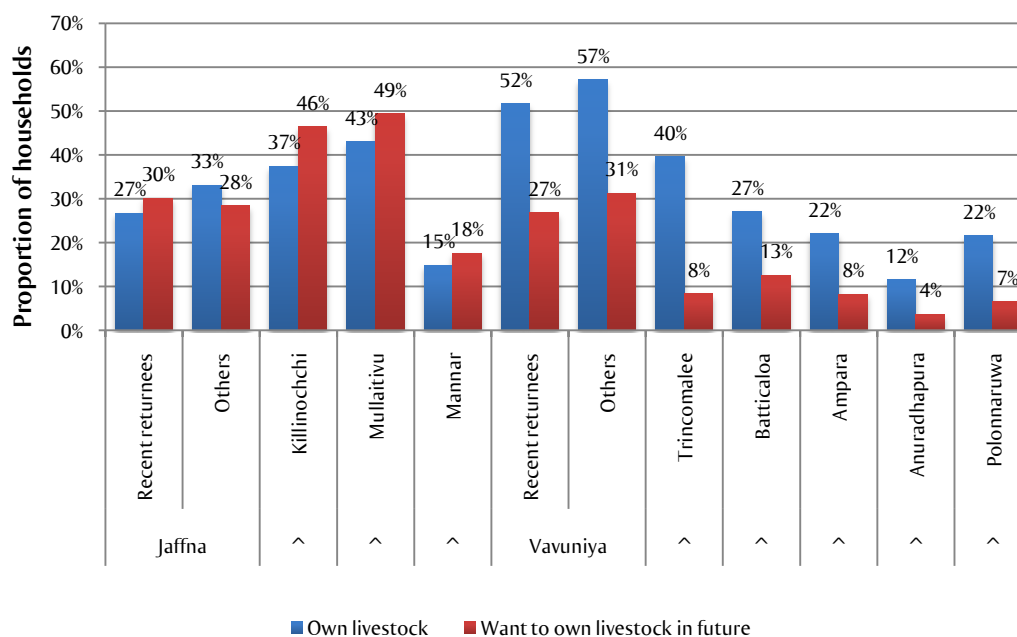
It is worth noting that in the North Central Province more than 60 percent of farming households sell their goods to middlemen; almost no households sell it directly to the consumers. They either have no access to markets themselves or they are better off selling to middlemen. Meanwhile, in the Eastern Province as well as in the districts of Mannar and Vavuniya, around 40 percent of farming households sell their goods directly to the consumers.



7.3 Livestock

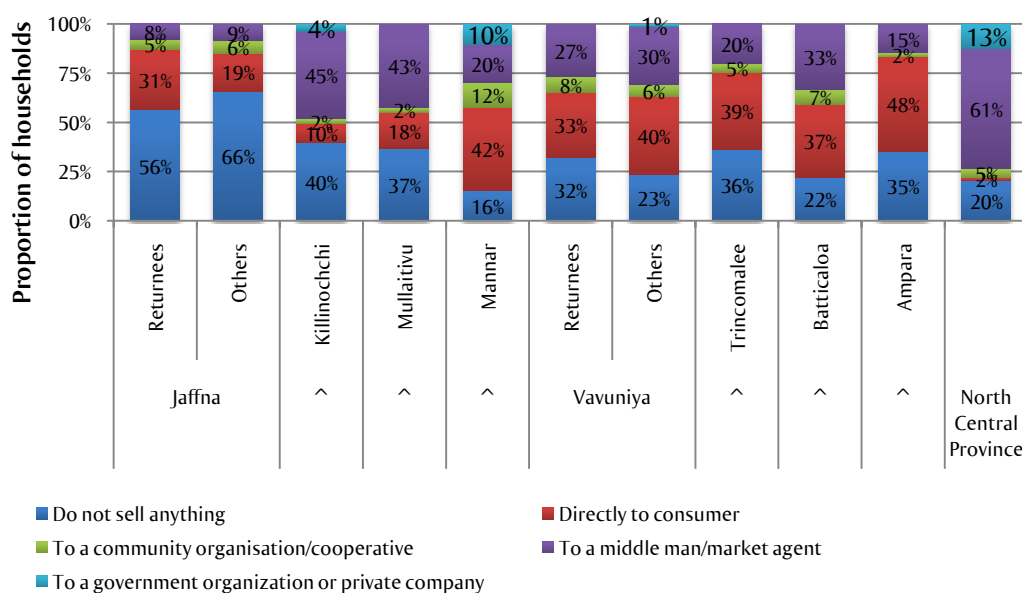
In comparison to farming, animal husbandry constitutes a major livelihood activity in all three provinces. Nevertheless, the proportion of households owning livestock widely varies among districts. Especially in the Northern Province, the proportion of households owning livestock ranges from 15 percent in Mannar to 57 percent of the not recently returned households in Vavuniya. In the Eastern and North Central Provinces, a small proportion of households own livestock. While in Trincomalee 40 percent of households reported to have livestock, it was only 12 percent in Anuradhapura.

Figure 33 : Livestock ownership

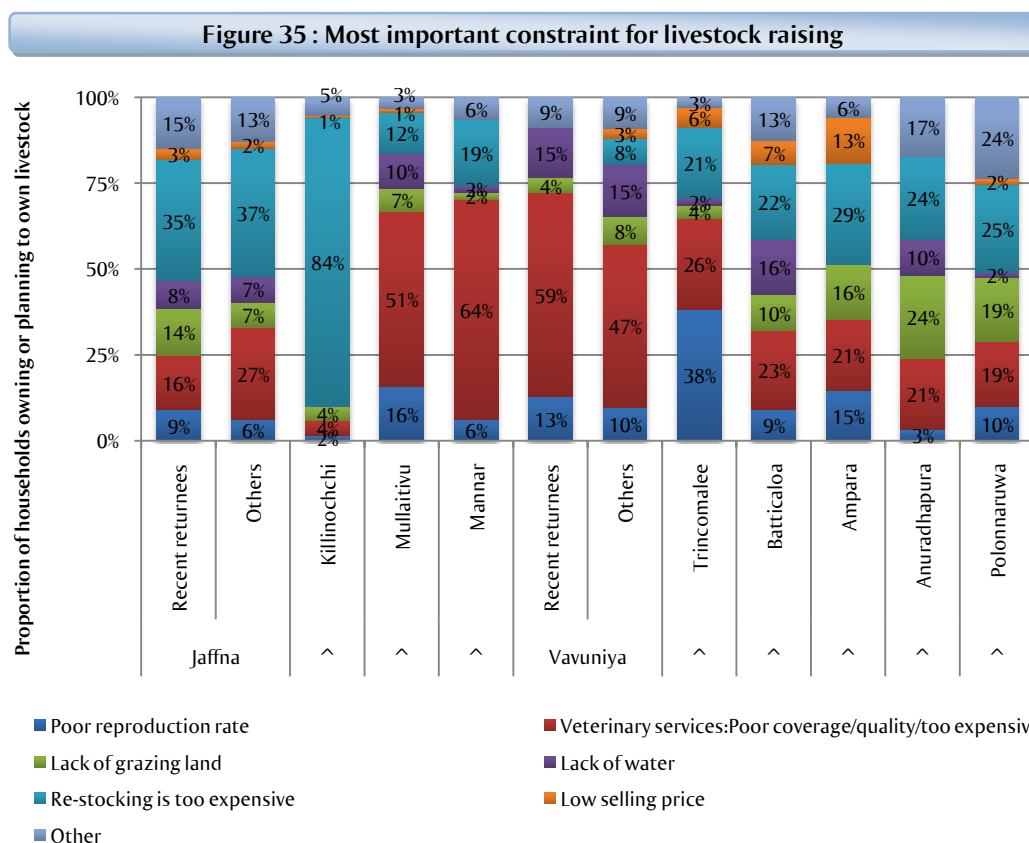


Approximately 60 percent of livestock owners in Jaffna did not sell their products while 25 percent sold directly to the consumers. In Killinochchi and Mullaitivu, 44 percent sold to a middleman, whereas few livestock owning households sold their products directly to the consumer. The proportion of subsistence farmers was lower than in Jaffna, yet, like in Trincomalee and Ampara it still ranged between 35 and 40 percent of household.

Figure 34 : Livestock owners' selling activities

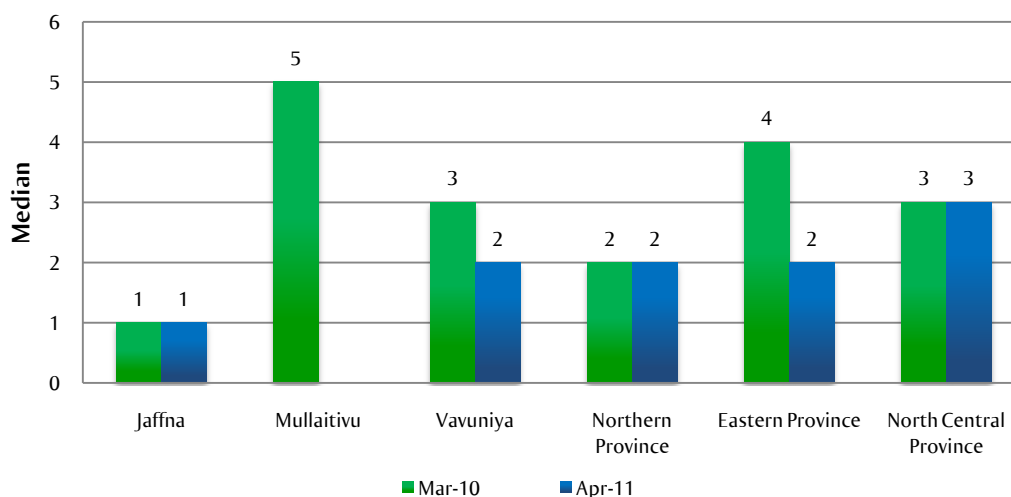


For all households that possessed or desired to possess livestock in future, a major limitation for raising livestock was the inaccessibility, low quality and high prices of veterinary services. More than 80 percent of households in Killinochchi and around 35 percent in Jaffna claim that the high expenses for re-stocking is a fundamental drawback. In the Eastern and North Central Provinces, the impediments to raising livestock are more diverse: Expenses for re-stocking and veterinary services and non-availability of grazing land are main limitations. Particularly in Trincomalee, a poor reproduction rate is perceived as a major constraint. In addition, more than 10 percent of households in Mullaitivu, Vavuniya, Batticaloa and Anuradhapura reported that the lack of water is a major impediment for livestock ownership.



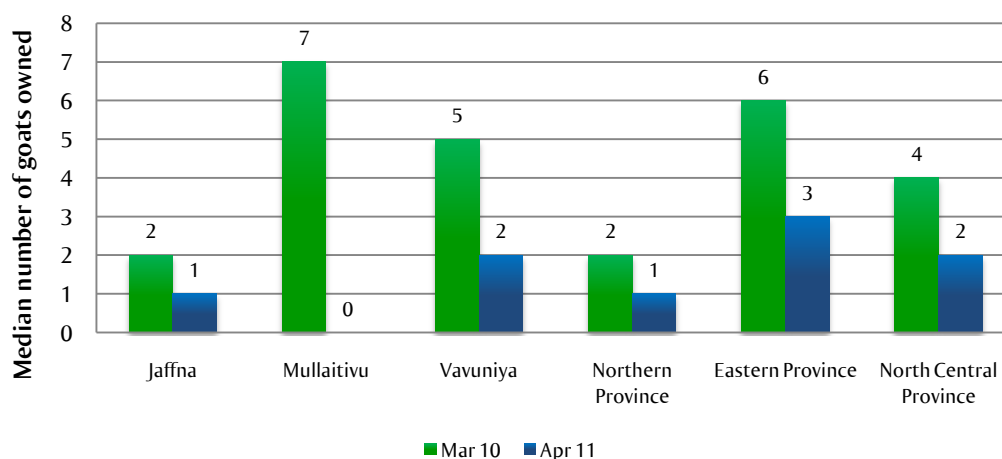
During the last year, the median number of livestock owned has decreased in the districts of Mullaitivu and Vavuniya as well as in the Eastern Province. In particular, in Mullaitivu the median number of cattle owned by households that engaged in cattle farming dropped from 5 cows to 0 cows. Since more than 50 percent of livestock raising households in Mullaitivu claimed that the expensive, not widely available or low-quality veterinary services are their major limitations to raising livestock, it could be inferred that these constraints also contribute to the falling median number of cattle. On average however, the median remained equal in the Northern Province, which is similar to that of the North Central Province.

Figure 36 : Median number of cattle owned



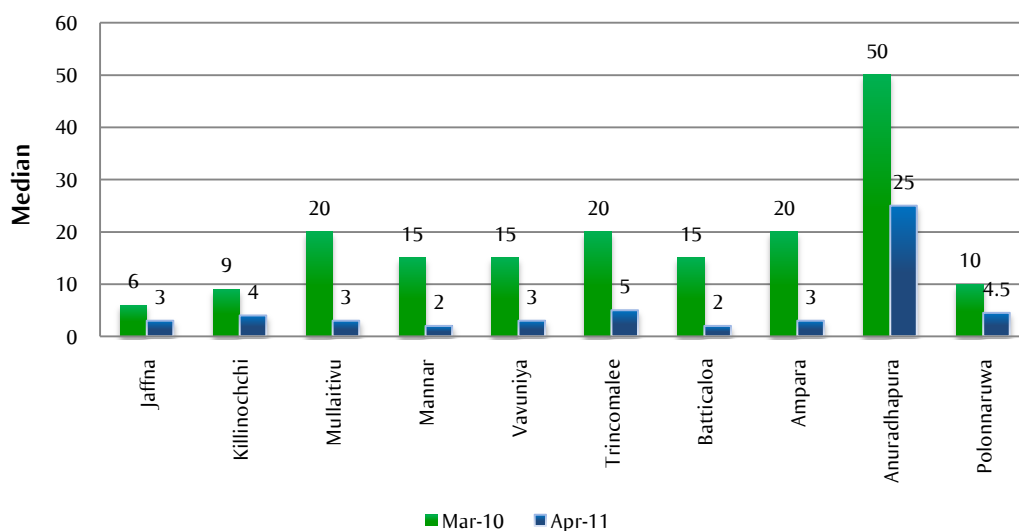
Compared to the trends in cattle ownership, the median number of goats owned did not increase when comparing the data of March 2010 and April 2011. In Mullaitivu, Vavuniya, the Eastern Province and the North Central Province, the median number of goats owned fell by at least 50 percent. Possible reasons for the lower median number of goats owned in the Northern Province may be due to low-quality or expensive veterinary services: 50 percent of all households that witnessed a decrease in their number of goats from March 2010 to April 2011 stated that the veterinary services constitute a major constraint for them when raising livestock. In the North Central Province, 40 percent of all households that witnessed a decrease in their number of goats indicated the high expenses for re-stocking as their major limitation.

Figure 37: Median number of goats owned



The median number of poultry owned by households that possessed poultry drastically fell in all districts. In the Eastern as well as Northern Province, the median number amounted to 3 at the time of assessment, while it ranged from 6 to 20 in March 2010. The highest median number of poultry owned by households was still found in the North Central Province.

Figure 38 : Median number of poultry owned

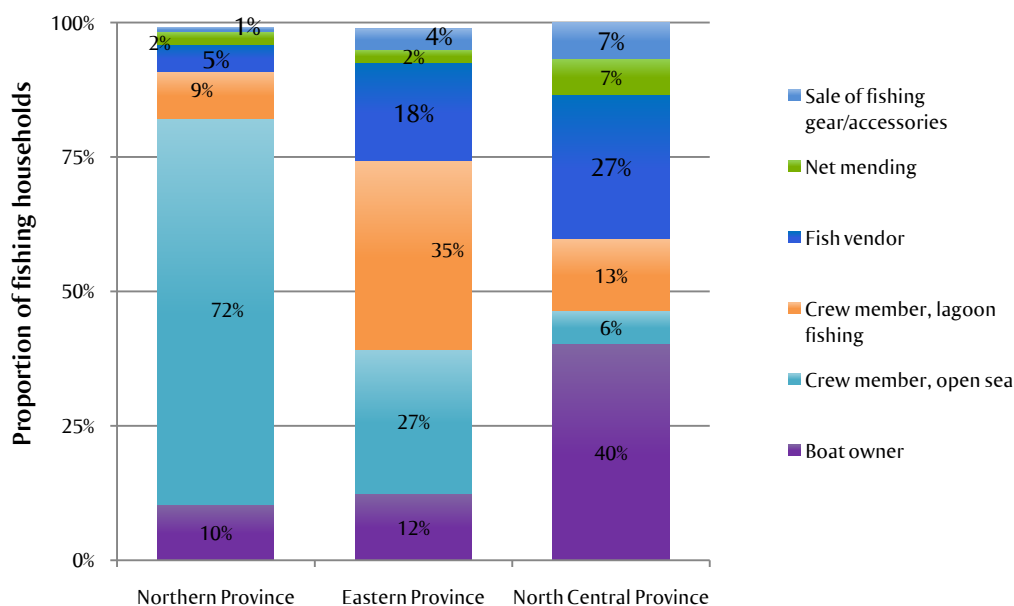


When looking at the key informant data, similar constraints as the ones previously presented can be observed. Firstly, the poor services of veterinary facilities were mentioned as a major constraint to livestock ownership. Informants also made it clear that the lack of grazing lands and degraded grass lands have become a major limitation in the Northern, North Central and Eastern Provinces. Higher costs of restocking were also perceived as a big challenge in the Eastern Province. Some clusters in Polonnaruwa district mentioned that the lack of water for animal rearing was also an issue. Lastly, clusters in the North indicated that landmines and the lack of proper markets were still common constraints in war affected areas of Vavuniya and Mullaitivu.

7.4 Fishing

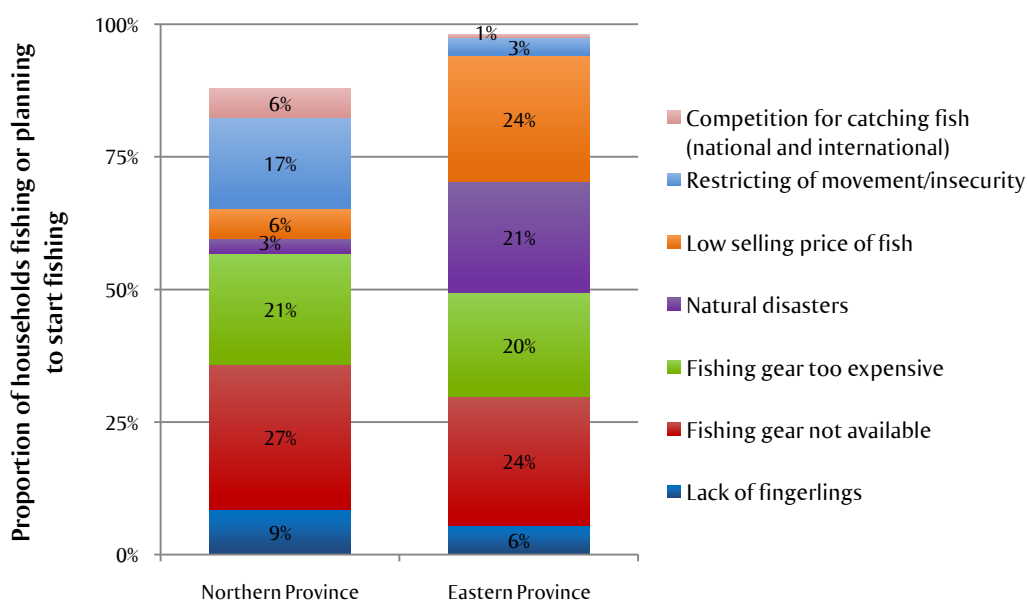
Most persons involved in fishing were employed as crew members. In the Eastern Province as well as in the district of Killinochchi, 20 to 37 percent of fishermen households worked as crewmembers in open sea and 15 to 55 percent were crewmembers of lagoon fishermen. In Vavuniya, all fishing households were engaged as crew members in lagoon fishing.

Figure 39 : Activities of fishing households

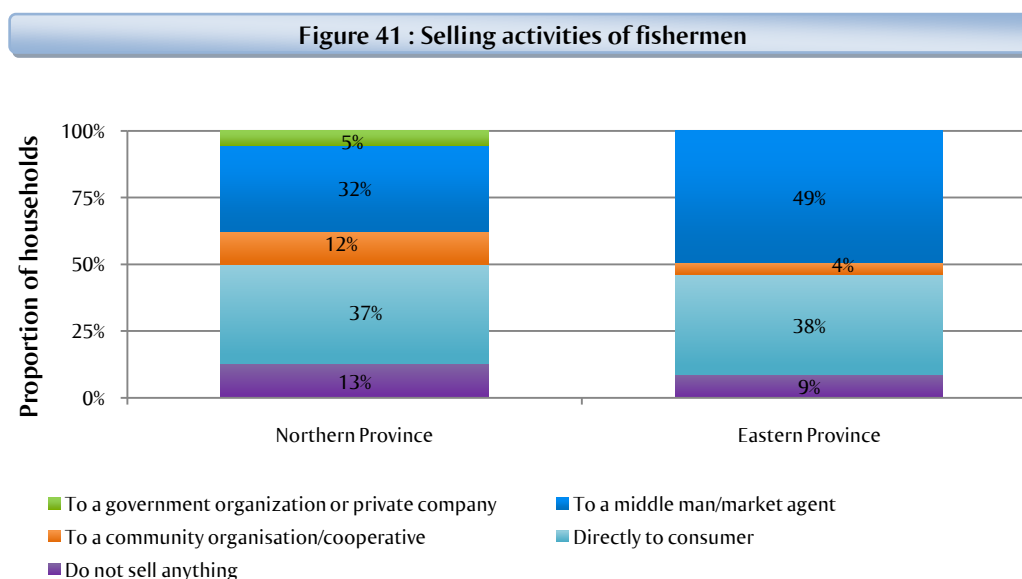


The major challenges faced by fishing households involved either the high prices of the fishing gear or the non-availability of equipment. Almost half of all fishing households in the Northern and Eastern Provinces reported one of these factors to be a major constraint. In the Northern Province, 17 percent of fishing households claimed that restricted movement and the overall insecurity, limit their abilities to fish. In contrast, only 3 percent of households in the Eastern Province stated that security is their major restriction; for 24 percent the low selling price of fish and for 21 percent the risk of natural disasters was a major problem.

Figure 40 : Constraints to fishing



When considering only fishing households into account, the majority sold either to a middleman (32 percent in the Northern Province and 49 percent in the Eastern Province) or directly to the consumer (around 38 percent). Approximately every tenth fishing household did not sell their fish but used it for self consumption. Furthermore, in the Northern Province, 17 percent of fishing households sold to a community organization, the government or a private company.



When asking key respondents about the main limitations in fishing, they explained that constraints vary widely between districts. The lack of capital for purchasing new fishing gear and paying back loans were the two main constraints faced by fishermen in the Trincomalee district. In the inland districts, marketing opportunities were mentioned as a main constraint for fishing. Simultaneously, the loss of fishing gear and tools were the main constraints in Batticaloa, Mullaitivu and Jaffna districts. In the Northern Province, the most common limitations for fishing were high competition, reduced access to fishing facilities due to high security zones as well as poor marketing facilities.

This section has focused on three common livelihood activities in all districts: farming, livestock and fishing. Many farming households perceived the shortage of water, particularly when engaged in home gardening, to be a major constraint for their livelihood activities. Other obstructions included the high expenses and the non-availability of land and seeds. It was also shown that many did not cultivate during the *yala* season because of the availability of other more profitable livelihood activities. This was especially due to the damaged or lack of proper irrigation systems. In households that owned livestock, many had experienced a decrease in their medium number of livestock. Constraints to livestock rearing included poor geographical coverage as well as high cost of veterinary services, high cost of re-stocking and non-availability of grazing land. In terms of fishing households, it was found that most fishermen work as crewmembers – the major constraint here being the shortage of or high price of fishing gear.

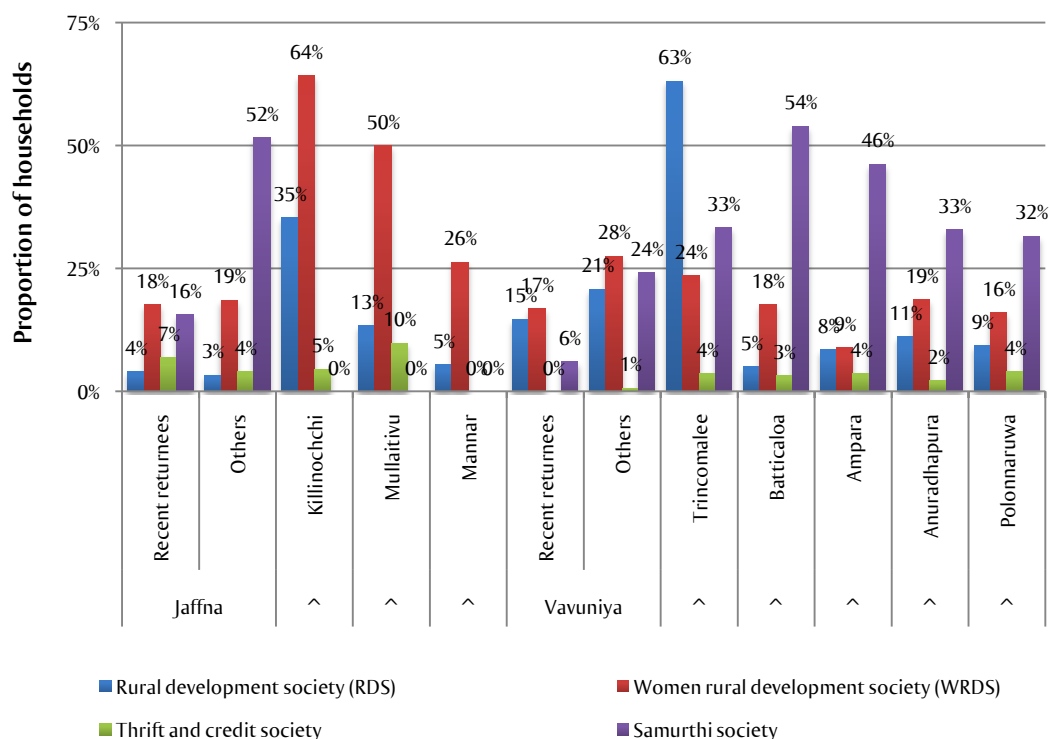
8 Livelihood organizations

Household participation in civil society and livelihood organizations is common. Membership in rural development societies (RDS), women rural development societies (WRDS) and Samurthi societies is particularly prevalent in the region.

The main objective for RDS is to facilitate development initiatives such as the common asset creation, infrastructure development and livelihood development activities. RDS participation is especially high in Trincomalee and Killinochchi, and WRDS participation is also widespread in Killinochchi and Mullaitivu.

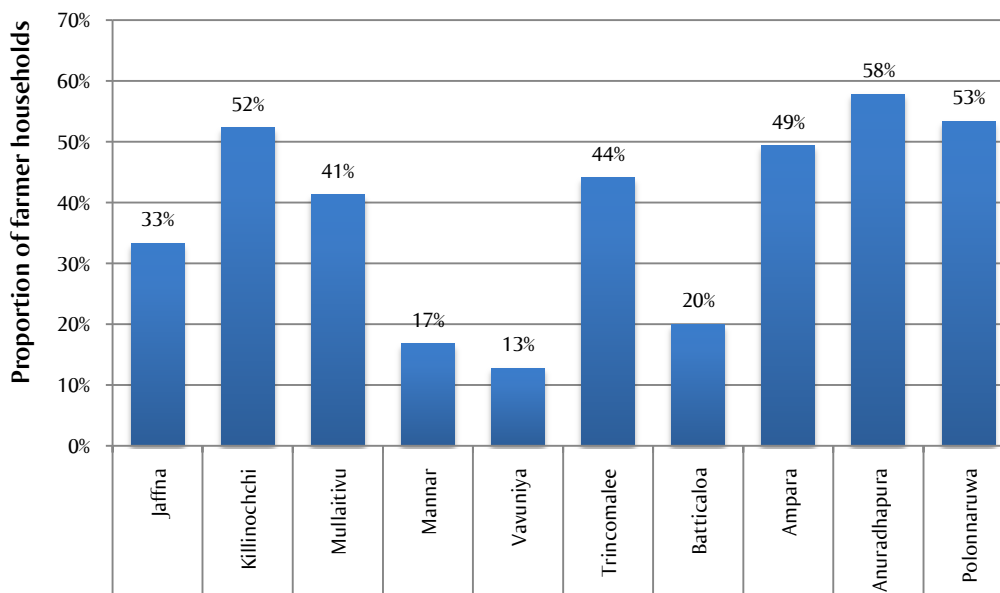
Samurthi is the governmental safety net program for poverty alleviation. It has a wide coverage in the Eastern and North Central Province, however, it has not yet been introduced in the returnee areas of the Northern Province except Jaffna. As a result, no households in Killinochchi and Mullaitivu are members as yet.

Figure 42 : Participation in livelihood organizations



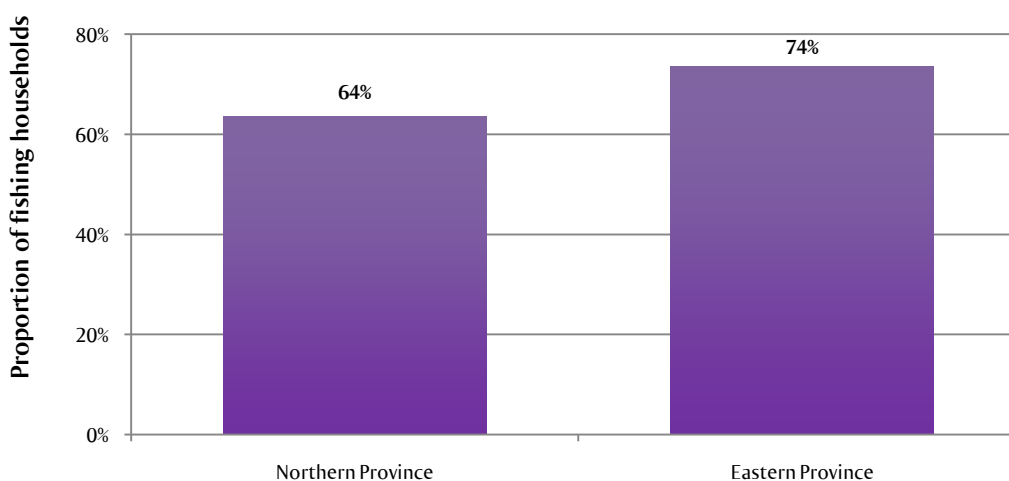
Taking into account all farming households, more than half are organized in a farming society in the North Central Province. While in Killinochchi, Mullaitivu, Trincomalee and Ampara, the proportion of farming households in farmer organizations amounted to around 50 percent, it only accounted for about 15 percent in Mannar and Vavuniya.

Figure 43 : Proportion of farmer households participating in farmers' organizations



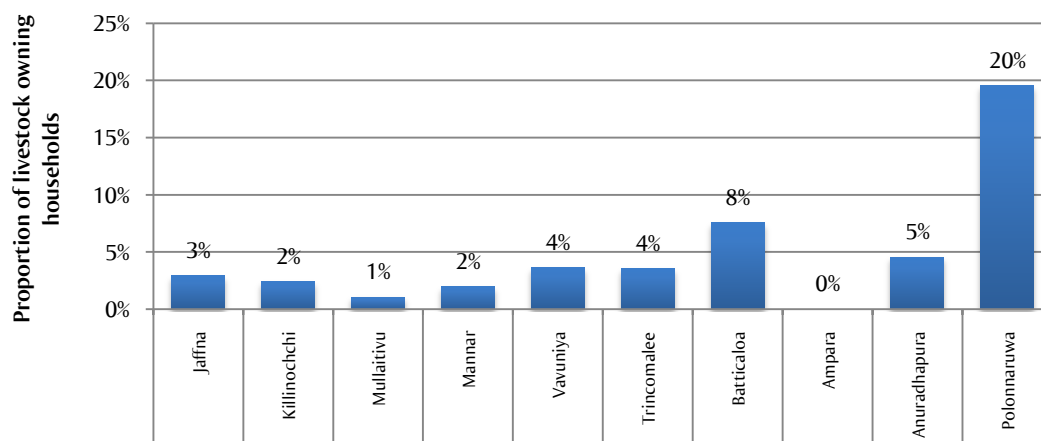
In contrast, the proportion of fishing households engaged in a fishing society was much larger: In the Northern Province, 64 percent of fishing households participated in such societies, compared to the Eastern Province where the proportion amounted to 74 percent.

Figure 44 : Proportion of fishermen households participating in fishing societies



Of all households that owned livestock, very few were involved in livestock societies. In particular, in the Northern and Eastern Provinces, the proportion of such households was below 10 percent. The district of Polonnaruwa however, showed a much larger proportion, 20 percent, of livestock society engagement.

Figure 45 : Proportion of livestock rearing households participating in livestock societies

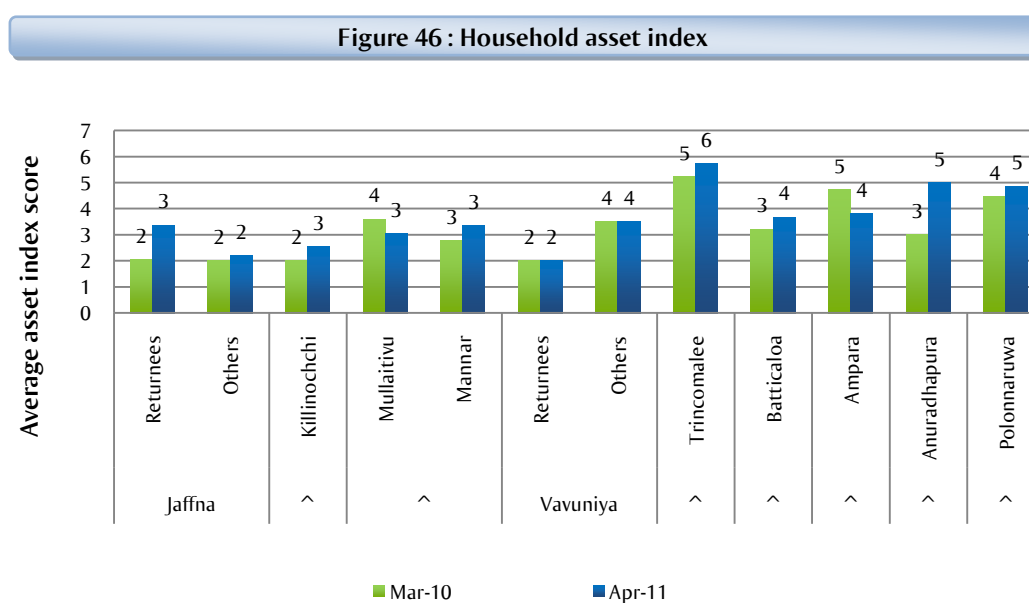


9 Assets ownership

While previous chapters presented the income sources as well as main livelihood activities, this chapter focuses on households' wealth in terms of assets. Often considering which assets a household possesses provides a good insight into the overall wealth and living standards. In the present survey, households' ownership of a wide range of assets – including televisions, mobile phones, jewellery, etc., as well as different livelihood-related commodities such as tractors or fishing nets – were estimated.

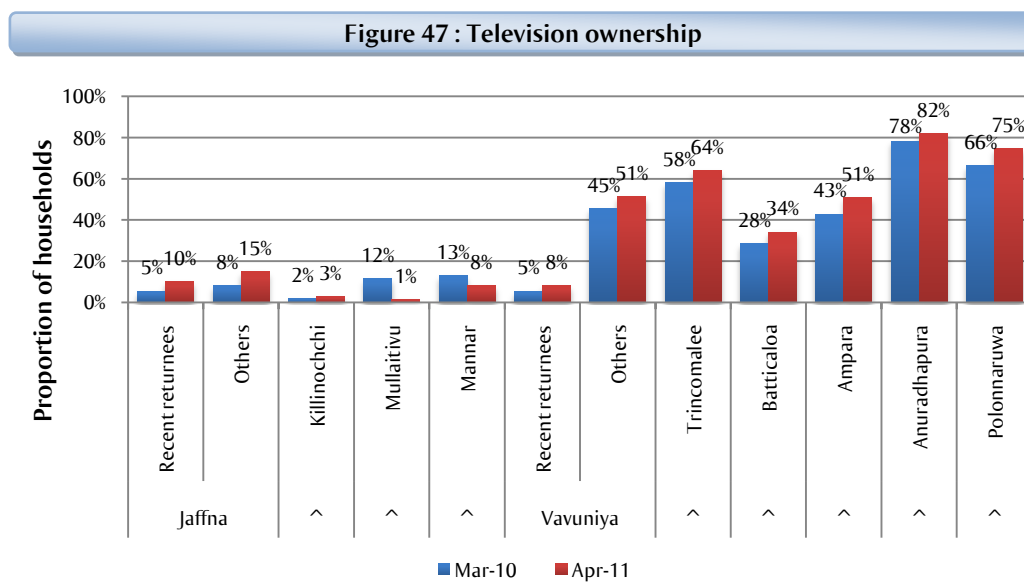
9.1 Non-livelihood assets

An index representing household wealth by measuring different assets was established. The index is calculated based on a basket of assets which are weighted according to their costs when buying and their perception of a luxury good²³. In order to be neutral for all segments of the population, livelihood assets were excluded from the index. When applied to the districts, the calculated asset index showed a lower household wealth in the North and a higher average wealth in the Eastern and North Central Provinces. Comparable results were also indicated by the median income of households in Figure 12. When looking at the wealth development in the past year, the index shows that in all three provinces there is an upward trend in asset wealth but a decline in the districts of Mullaitivu and Ampara. Furthermore, Figure 46 also shows that in terms of asset ownership, households in the Eastern and North Central Provinces are better off than in the Northern Province. The relatively poor asset base of households in the Northern Province is not surprising given the prolonged and recurring waves of violent conflict affecting loss of lives, displacement and destruction of private and public property.



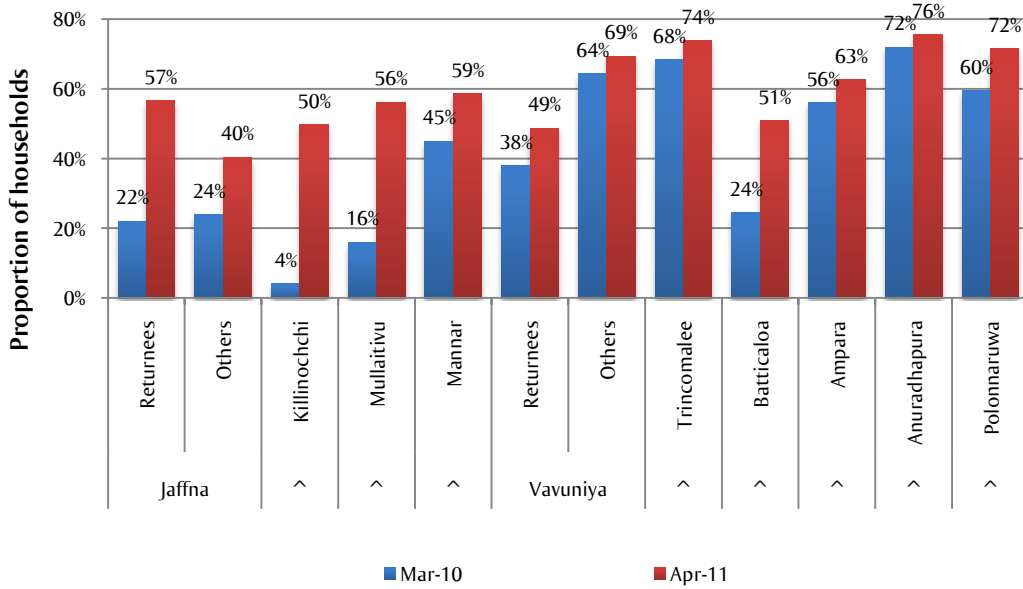
²³ The index is based on several commodities with each commodity being assigned a value from 1 to 3 depending on its costs and its status as luxury good: mosquito net(1), jewelry (1), television (1), radio (1), bicycle (1), wheeler (2), motorbike (2), other motor vehicle (2), electric fan (2), sewing machine (2), fridge (3), washing machine (3)

In terms of individual assets, let's take the example of the television. In most districts of the Northern Province, very few households own televisions, usually less than 10 percent. At the same time more than half of all households in Trincomalee, Anuradhapura, Ampara and Polonnaruwa reported to the possession of a television; only in Batticaloa less than half of the households (35 percent) had televisions. Major discrepancies were found between those recently returned and other households in Vavuniya: only 8 percent of recently returned households owned televisions while it was 50 percent in other households. Although much more drastic, this indicates a similar pattern of wealth as does the household index.



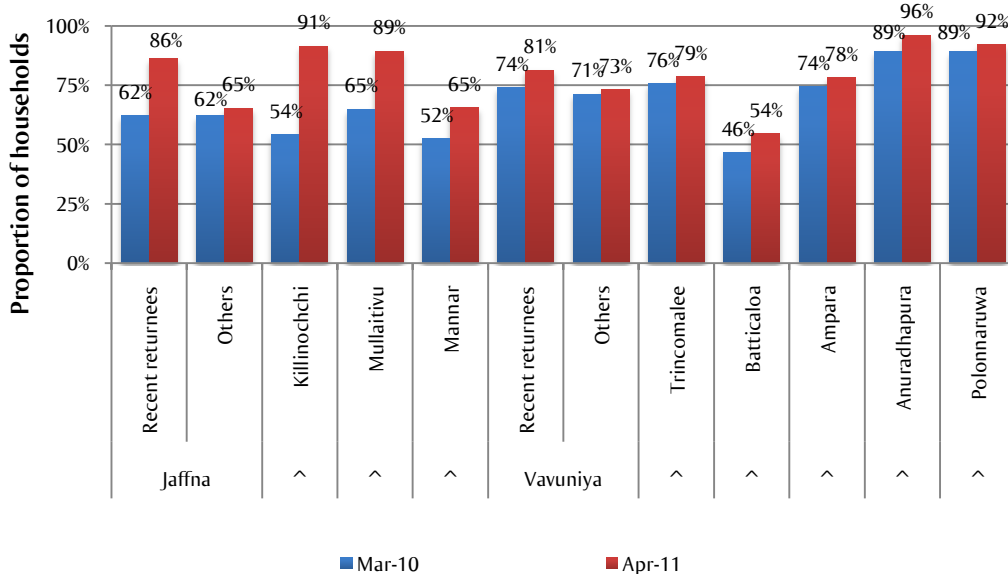
Interestingly, in all districts the proportion of households owning mobile phones strongly increased from March 2010 to April 2011. In Killinochchi and Mullaitivu, about every second household owned a mobile phone while it had been only 4 percent and 16 percent in March 2010 respectively. In the Eastern and North Central Provinces, the increase was not as marked; only Batticaloa exhibited a much larger proportion of households owning a mobile phone at the time of assessment than prior to one year. (The increase in Batticaloa came from a relatively lower original level).

Figure 48 : Mobile phone ownership



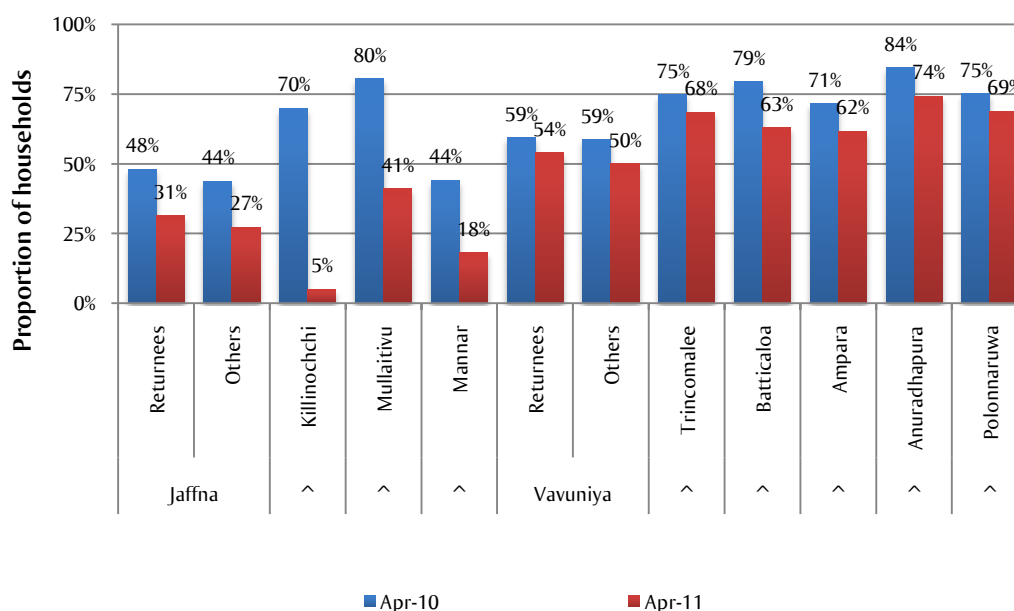
Within the last year, an increase in the proportion of households owning a mosquito net was observed. In particular in the Northern Province, mosquito nets have been distributed and thus a majority of households reported owning a mosquito net at the time of the assessment.

Figure 49 : Mosquito nets ownership



In light of the gap between reported income earnings and level of expenditures, sale of assets constitutes a possible coping strategy. Although there is little evidence suggesting large-scale depletion of household and livelihood assets, a widespread liquidation of jewellery was noticed. The most dramatic change was seen in Killinochchi, where 70 percent of households said they owned jewellery one year ago, but only five percent reported owning jewellery at the time of the assessment. Similar changes, although less pronounced are evident in Jaffna, Mullaitivu and Mannar.

Figure 50 : Jewellery ownership

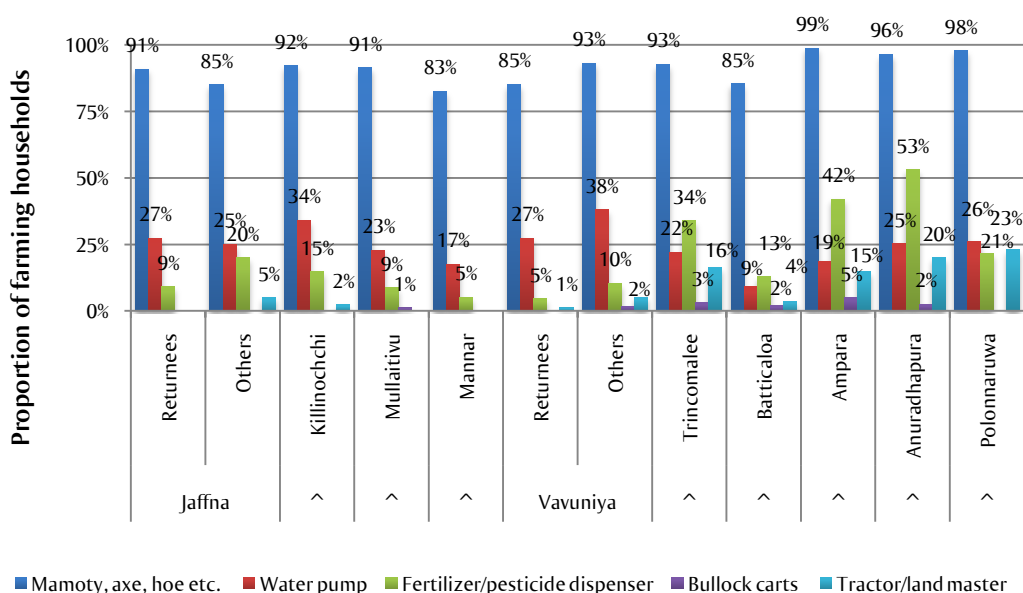


9.2 Livelihood assets

Regarding specific livelihood groups, almost all surveyed farmer households were found to possess a *mammoty*, axe or similar equipment. In the Northern Province about every third farming household also owned a water pump; in the Eastern Province, however, it was only around every fifth farmer household. Yet, overall farming households particularly in the North Central but also in the Eastern Provinces seem to be better equipped than in the Northern Province: for instance, more farmers in the Eastern and North Central Provinces used fertilizer spreaders than in the Northern Province. In Ampara, 42 percent and in Anuradhapura, 53 percent reported owning fertilizer spreaders. A similar pattern can be observed regarding tractors and land-masters. In the Eastern and North Central Provinces around every fourth or fifth farmer household possessed a four wheel tractor or a two wheel tractor; in the Northern Province very few households possessed one. The exception to this pattern is found in Batticaloa district, in which only 13 percent of farmer households had fertilizer spreader and only 4 percent possessed a tractor.

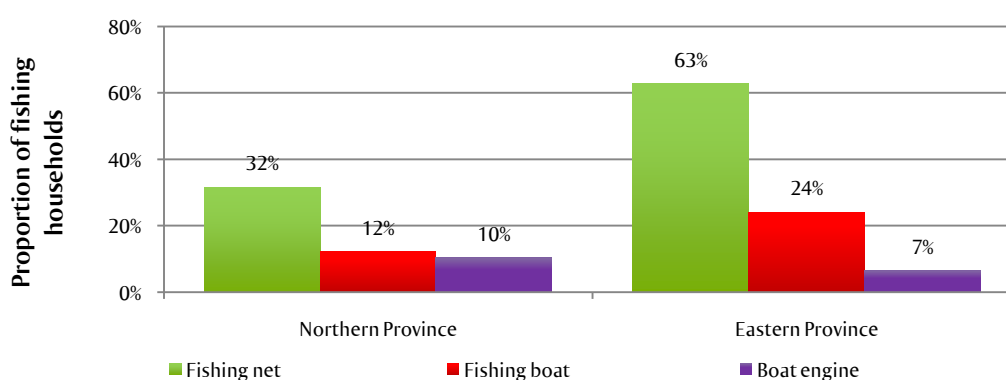
Overall, it appears that in wealthier districts in the North Central Province and the Eastern Province, a larger proportion of households owned fertilizer spreaders or tractors. Bullock carts did not seem common in the Northern Province. Notably, the proportion of households owning a water pump did not seem to follow a clear pattern - such as for the wealth of the district.

Figure 51 : Assets of farmers



Of all fishing households, a large proportion of households were partly or not at all equipped with common fishing tools such as a net, boat or a boat engine. Particularly in the Northern Province, fishing households often lacked these assets. Only about one third of the fishing households in the Northern Province possessed fishing nets while approximately one fifth of the fishing households owned a boat or a boat engine. In comparison, 63 percent of fishing households in the Eastern Province owned fishing nets, which equals to almost twice the proportion of that of the Northern Province. This is also consistent with the findings of fishing households' livelihood constraints in Figure : Most fishing households, especially in the Northern Province, affirmed that their major constraints are the non-availability or high costs of fishing gear.

Figure 52 : Assets of fishing households



In summary, household assets increased from March 2010 to March 2011 on average; yet, strong differences between the poorer Northern Province and the other provinces are still evident regarding general as well as livelihood specific assets. In particular, Killinochchi showed an alarming liquidation and depletion of assets. By selling jewellery, many households in Killinochchi intended to achieve a higher household income in order meet their day today expenditures.

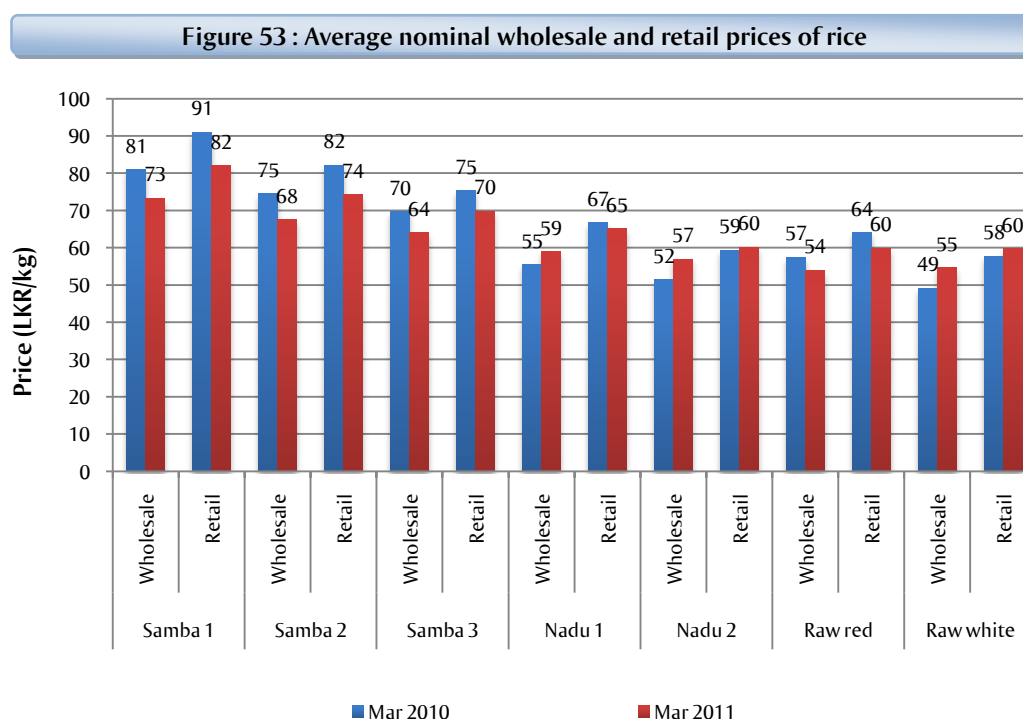
10 Markets and food availability

This chapter explores changes in the prices of key food commodities over the last year, in nominal and real terms, how these changes are perceived by the population, extent of market density and degree of food availability in markets.

10.1 Price behavior

Wholesale and retail prices of most rice varieties decreased by less than 2 percent compared to the same period last year because of the arrival of the 2010/11 *maha* harvest to the markets which was larger than the previous year's *maha* harvest. Samba rice varieties saw the largest decrease in price, in the range of 7 to 10 percent as a result of big samba *maha* harvest (in 2010/11) in the dry and intermediate zone.

Nadu (long grain) and *kekulu* (raw white) price have increased, contrary to the general rice price decline. National average of wholesale prices of *nadu* 1 and *nadu* 2 increased by 6 percent and 10 percent respectively from March 2010 to March 2011. The average yield of long grain rice was lower than the previous year in most of the major producing areas (especially in the Eastern province) due to the floods and low-quality paddy seeds (a result of the persistent adverse weather). Therefore, the price of long grain rice did not decrease below that of last year.



Source : Monthly Food Information Bulletin, March 2011, HARTI.

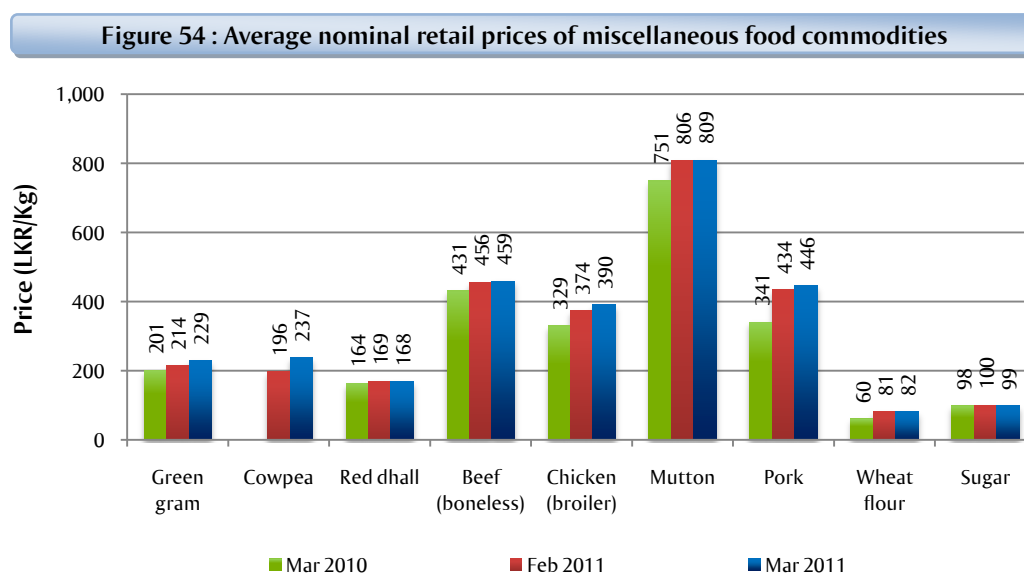
The HARTI Food Information Bulletin for March 2011 further mentioned that rice milling outturn for the month of March has declined in Eastern and North Central Provinces due to the low quality of paddy from the *maha* harvest.

On the paddy production side, producer prices of white short grain paddy, white long grain paddy and red long grain paddy have all decreased compared to last month (February 2011), by 1-10 percent, 2-9 percent and 3-10 percent respectively²⁴. White short grain and white long grain varieties are more widely consumed than the red varieties.

The lowest producer price of Rs.26/kg was reported for white long grain paddy in Ampara. However, compared to the same period of last year, the prices of white long grain paddy have increased in the range of 5-13 percent while the prices of white short grain have decreased in the range of 3-10 percent in most of the major producing areas.

Figure 54 shows change of the national average²⁵ of nominal retail prices for some other important food commodities. The nominal prices have increased over the last twelve months for all the commodities, largely due inflation. However, the March bulletin has revealed that prices of most vegetables (beetroot, raddish, cucumber, brinjal, okra, bitter gourd, snake gourd, luffa, long beans, and pumpkin) have decreased in the range of 30-50 percent when compared to February 2011. The low country vegetable prices were very high in February because of floods. However, most of the farmers in the wet zone were involved in vegetable production since the prices were high. Therefore, at the initial time of harvesting after the floods, the supply level was very high. This excess supply of low country vegetables caused prices to decrease significantly. However, the prices were still remarkably higher than same time last year.

The prices of beans, carrot, cabbage, knoll-khol, tomato, okra, pumpkin and capsicum were at a remarkably high level in March 2011 compared to the corresponding period of the previous year. This is mainly due to the destruction of vegetable cultivation by floods.

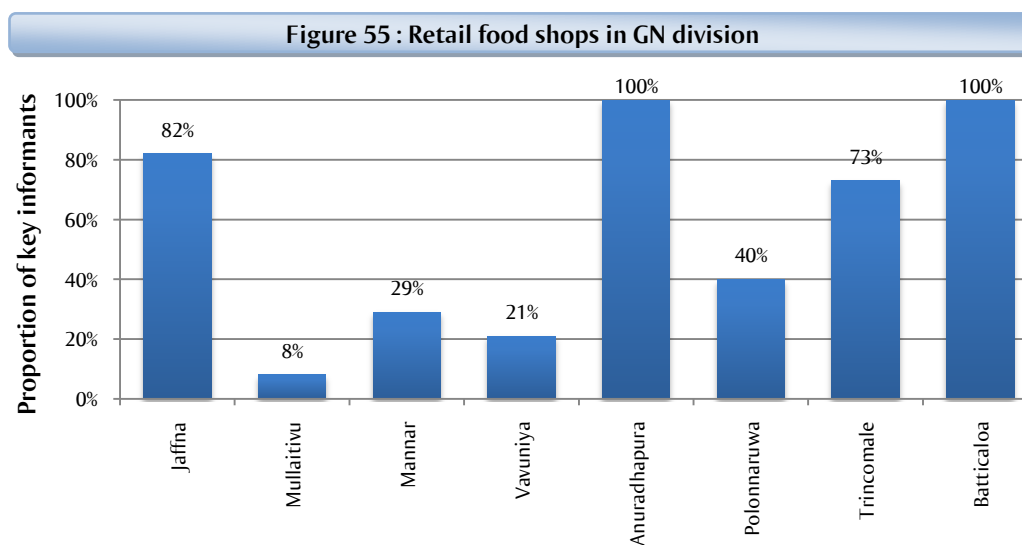


²⁴ The ranges depict the different change in different markets.

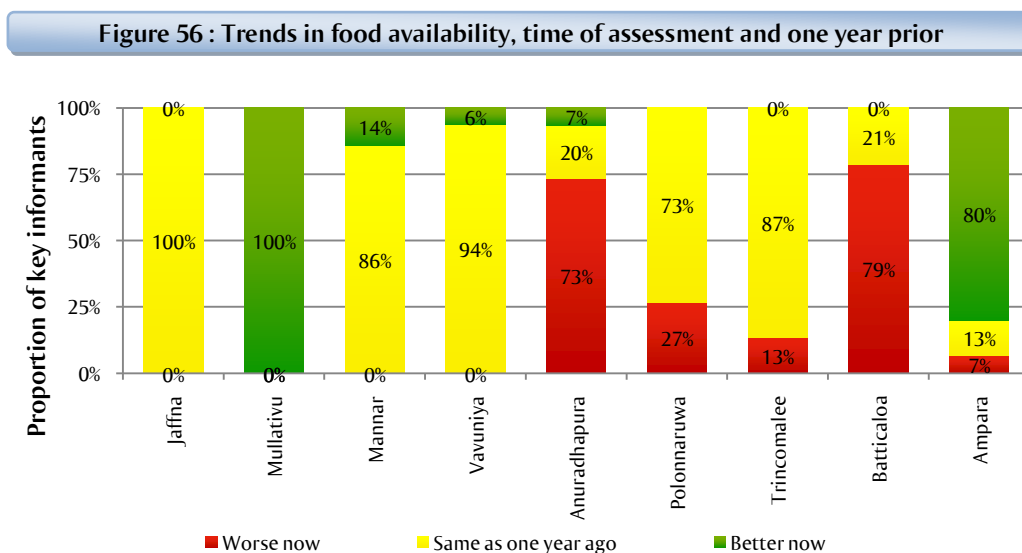
²⁵ Reference: Monthly Food Security Bulletin(HARTI) (March, February 2011)

10.2 Physical access to markets and food availability

In many districts, relatively few key informants stated that there was a retail food shop in their GN division, constituting a potential impediment to food access. While the proportion of sampled location having a food shop was 100 percent in Batticaloa and Anuradhapura, it was merely 8 percent in Mullaitivu. The limited existence of food shops in some GNs in the Northern Province could indicate that a strategy to facilitate the expansion of markets could be sought.



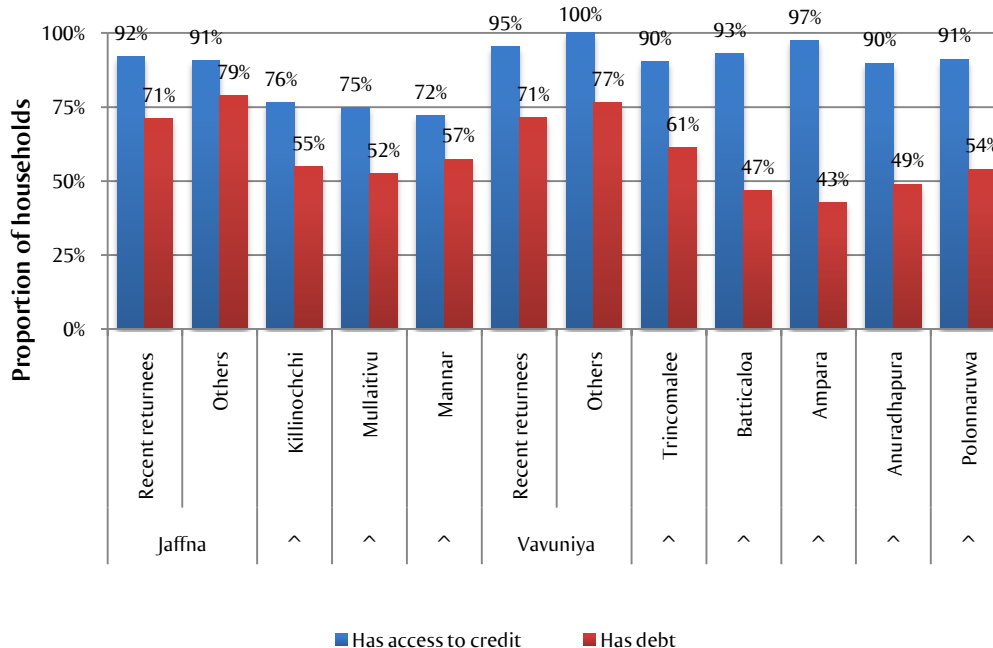
In spite of facing different access and travel time to markets, key respondents in the Northern Province indicated more positive trends in the trends in food availability than in the Eastern and North Central Provinces. Especially in Mullaitivu, 100 percent of informants agreed that food availability had improved from March 2010 to April 2011 while in all other Northern districts the majority of key respondents did not observe any major changes. In Anuradhapura and Batticaloa food availability seemed to have worsened.



11 Credit

A large majority of surveyed households, in the areas of relatively recent returnees, have access to credit (see Figure 57). For the purposes of this survey, a household is considered to “have access to credit” if it is in a position to take on credit if it chooses. Hence, it takes both geographic and economic access into account, meaning physical proximity and repayment ability. In most districts, about half of households were in debt at the time of the assessment, with the exception of Jaffna, Vavuniya and Trincomalee where the proportion was even larger. The proportion of households that were indebted follows a similar geographical pattern as access to credit, except in East and North Central Provinces where the tendency to obtain credit was relatively low despite the good access to credit. The propensity to borrow was similar in Killinochchi, Mullaitivu and Mannar but in these three districts it was partly caused by relatively poor access to credit.

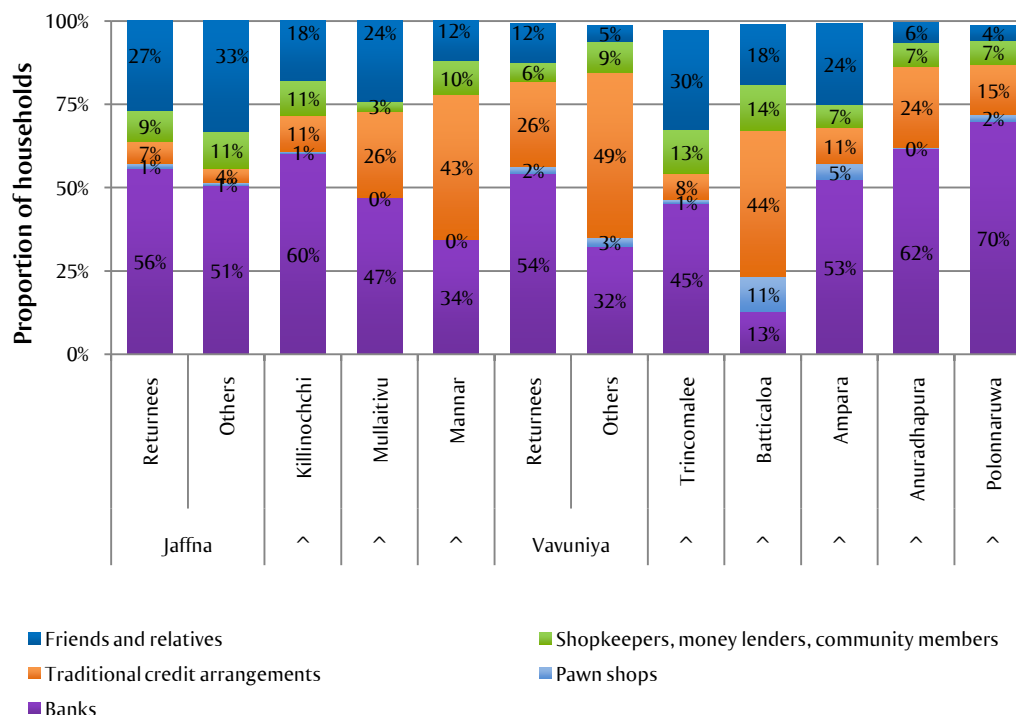
Figure 57 : Proportion of households with debt and access to credit or debt



Banks are the most common sources of credit, especially in the North Central Province. In some districts where banks were used by relatively fewer households, traditional credit arrangements²⁶ were more common. Although no quantitative data was collected on the nature of credit arrangements with banks, it was understood that some banks do provide pawning services.

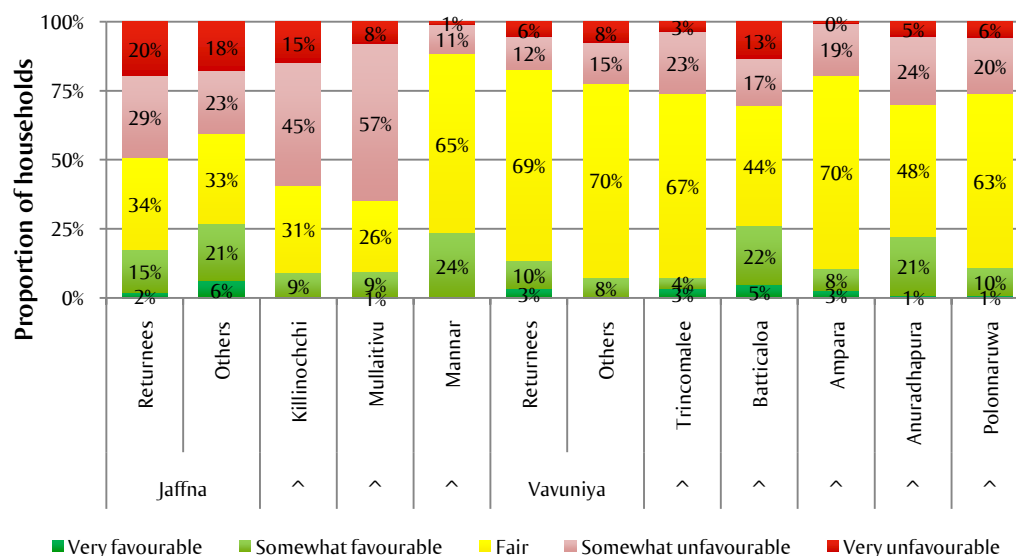
²⁶ Traditional credit arrangements include community level micro credit arrangements such as Seettu, village trust funds etc.

Figure 58 : Sources of credit



The terms of money borrowing are perceived as unfavorable by many households, especially in Killinochchi, Mullaitivu and Jaffna. Due to the different kinds of credit arrangements²⁷ and their complicated payment structures, it is difficult to accurately estimate the actual cost of credit. Therefore, households' subjective opinion about the terms of credit (see Figure 59) is probably the most interesting measurement of the cost of credit.

Figure 59 : Terms of borrowing



²⁷There are different types of local level credit arrangements called Seettu (by choice and random opportunity), Village money lender, village trust fund and small group systems etc. Most of the systems follow floating type monthly interest rates.

Regarding households that reported to have obtained loans, small differences across districts are seen in the absolute size of debts. Jaffna is the exception, where debts both for the recently returned and the not recently returned population were much higher than Vanni and the Eastern and North Central Provinces.

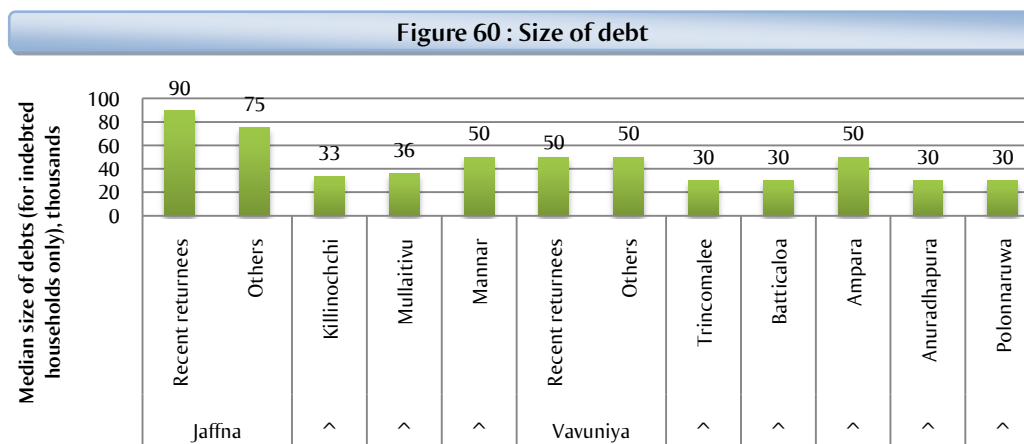
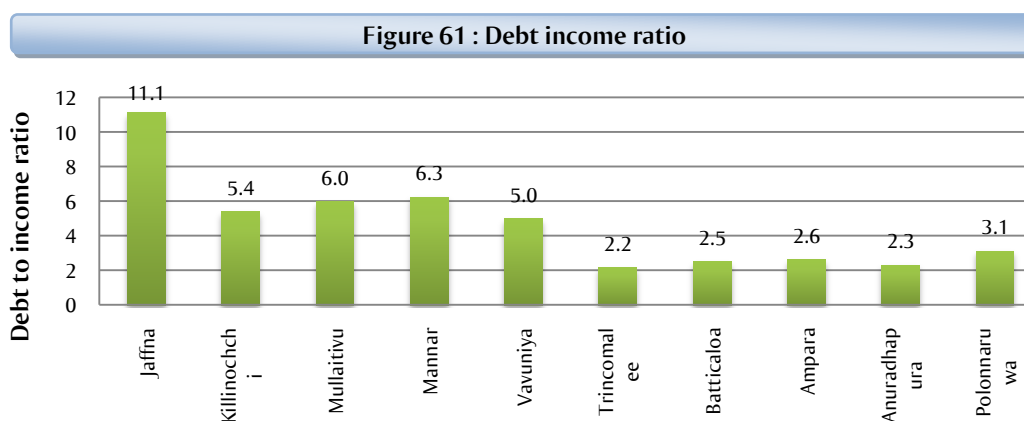


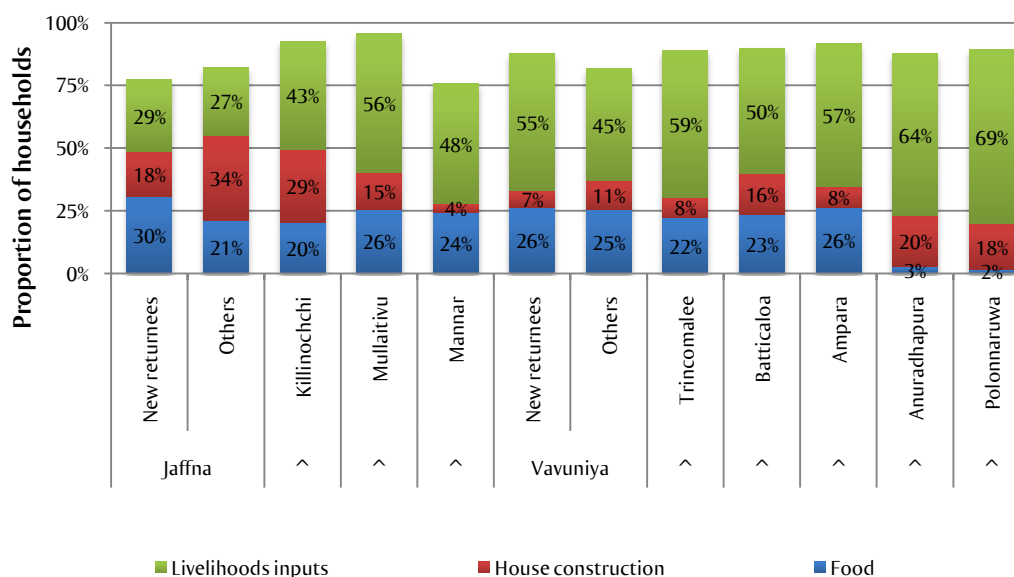
Figure 61 shows the average size of debts of indebted households, expressed in relation to monthly income²⁸. Jaffna has the highest degree of indebtedness followed by the Vanni area. The Eastern and North Central Provinces exhibit a lower degree of indebtedness. Despite relatively large debts, more than 90 percent of households in all districts believe they will be able to pay back their debts, with the exception of Jaffna, Anuradhapura and Polonnaruwa where the proportion is 82 percent, 88 percent and 54 percent respectively.



Most households report that they had used credit for potentially long-term profitable purposes such as investments in livelihoods and housing. However, a considerable proportion of households in the Northern Province (between 20-30 percent) state that their primary use of credit was to purchase food. The practice of seeking credit for the primary purpose of food consumption is a definitive sign of food insecurity, particularly in a post-harvest season. The pattern of credit use in Anuradhapura and Polonnaruwa indicates a more productive profile, with a large majority of households stating that they borrow for investments in livelihoods.

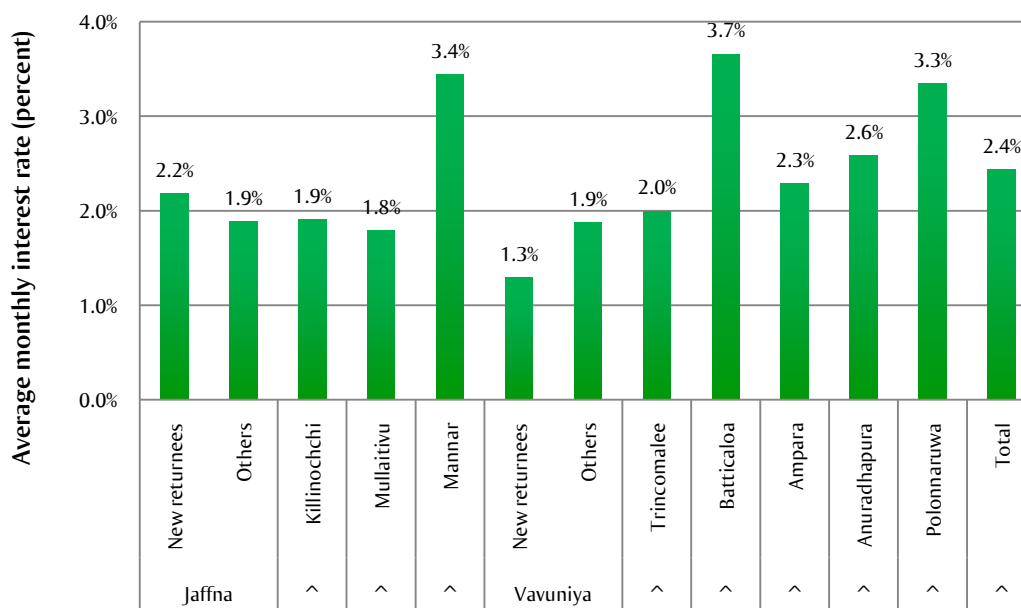
²⁸ For example, for an average indebted household in Mullaitivu the debt size amounts to 6 monthly incomes.

Figure 62 : Purpose of credit



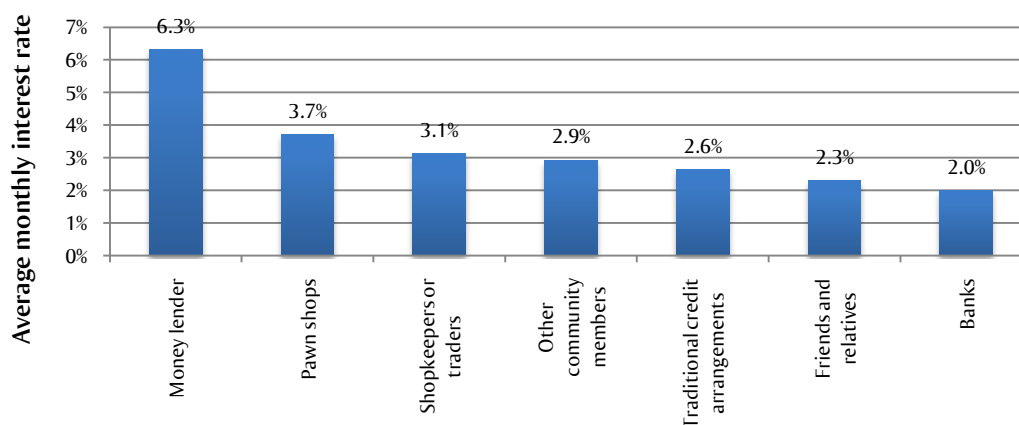
The monthly interest rate is 2.4 percent on average for all households (who have debt). Compounded, it is the equivalent of an annual interest rate of 29 percent (or 33 percent with cumulative interest). There is no apparent relationship between the degree of access to credit and the level of interest, with interest rates being elevated in Mannar, Batticaloa and Polonnaruwa.

Figure 63 : Average interest rates



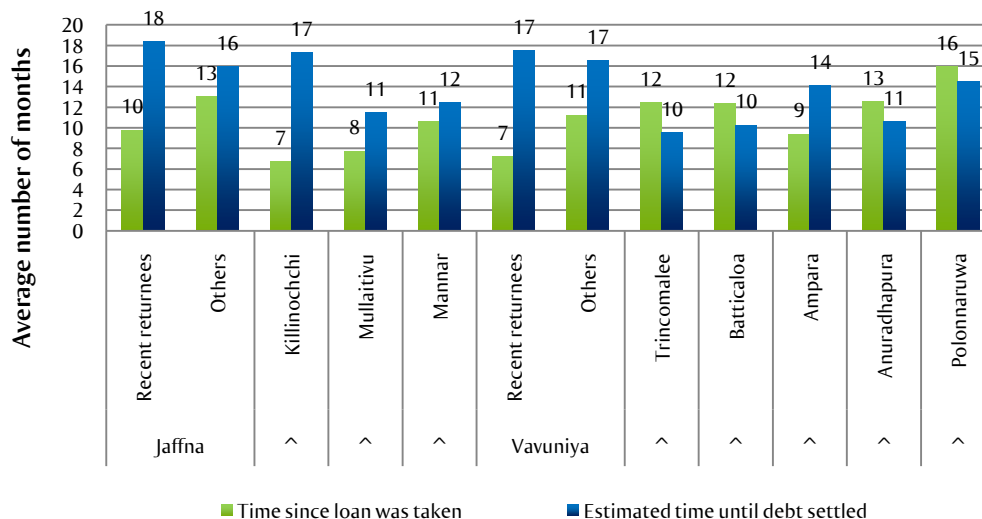
Interest rates do not appear to differ very much between credit sources although money lenders charge about twice the interest rate as other providers. Bank credits are the cheapest form of credit; they are even lesser than credits from friends and relatives.

Figure 64 : Interest rate, by source of credit



The duration of loans is another dimension of indebtedness. The time passed since the current loan or loans were taken is consequentially shorter for the recently returned population but otherwise no significant differences are seen across districts. However, the estimated time required to fully pay back loans varies geographically, with longer durations being reported in Jaffna, Killinochchi, Vavuniya and Polonnaruwa. While debt is difficult to interpret in terms of food insecurity²⁹, it is clear that the average household lives in a fairly permanent state of indebtedness, as opposed to taking on debt for a couple of months in the lean season and paying it back in the harvest season, which does not appear to be the main pattern of credit behavior.

Figure 65 : Duration of debts



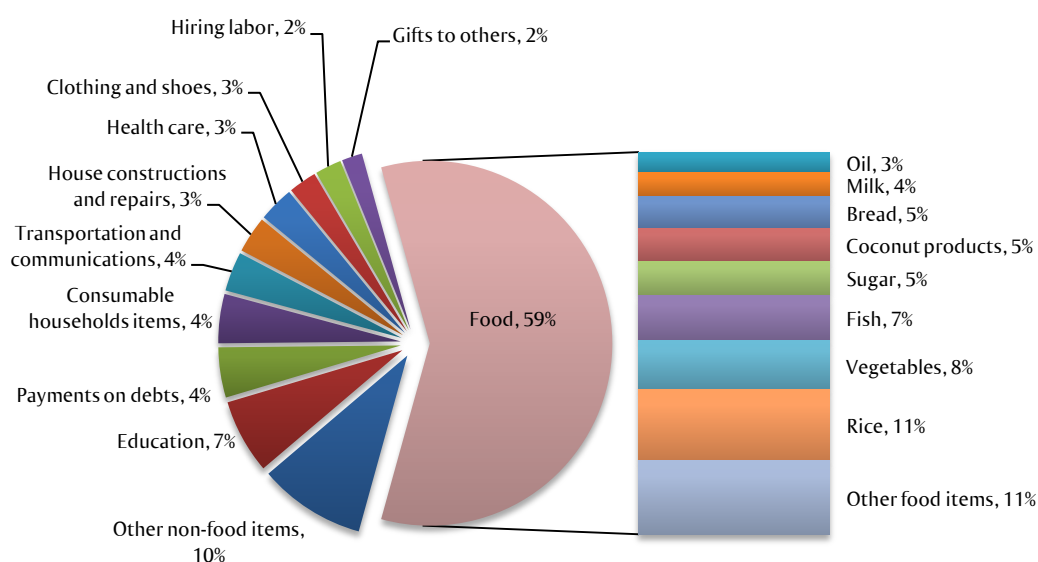
Overall, this section has shown that banks were the most common as well as the cheapest source of credit. The only exception to this was Batticaloa where banks seem to be less established and average interest rates were highest (3.7 percent). Regarding regional disparities in credit conditions and sizes, the terms of borrowing were found to be less favorable and on average, households incurred higher debt in the Northern Province.

²⁹ In fact, analysis of this data set shows that more food secure households tend to have had loans longer and expect to settle debts further in the future, compared to less food secure households.

12 Expenditures

The surveyed population spent most of their income on food. Rice, vegetables and fish were the individual items that accounted for the largest proportion of total expenditures. Education, debt payments, household consumables, transportation and communication were the largest non-food expenditure items.

Figure 66 : Expenditure breakdown



The proportion of expenditures spent on food is a common indicator of food insecurity. All other things being equal, a large proportion of food expenditures indicates a small income (since food is an essential item), a relative sensitivity to food inflation and a comparatively low tolerance for breaks in or shocks to income generation. The indicator is also an indirect measurement of in-house food production, as food producing households would tend to spend less of their income on food.

The average household in the Northern and Eastern Provinces spent a higher proportion of their income on food (62 and 64 percent respectively). The average households in the North Central Province spent 49 percent. The relatively low income share devoted to food in the North Central Province is partly explained by household food production.

Figure 67 : Proportion of income spent on food and staple³⁰ food items

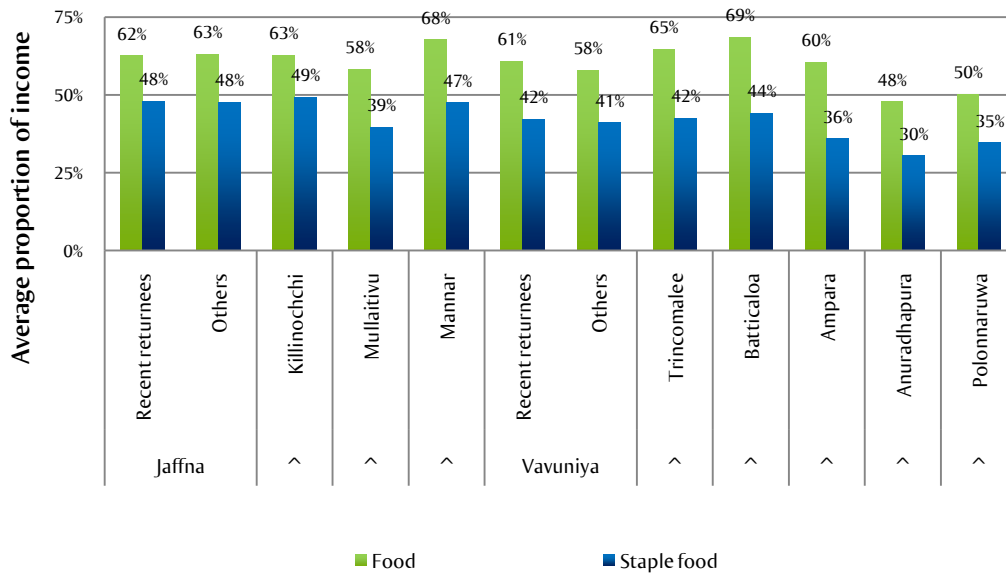
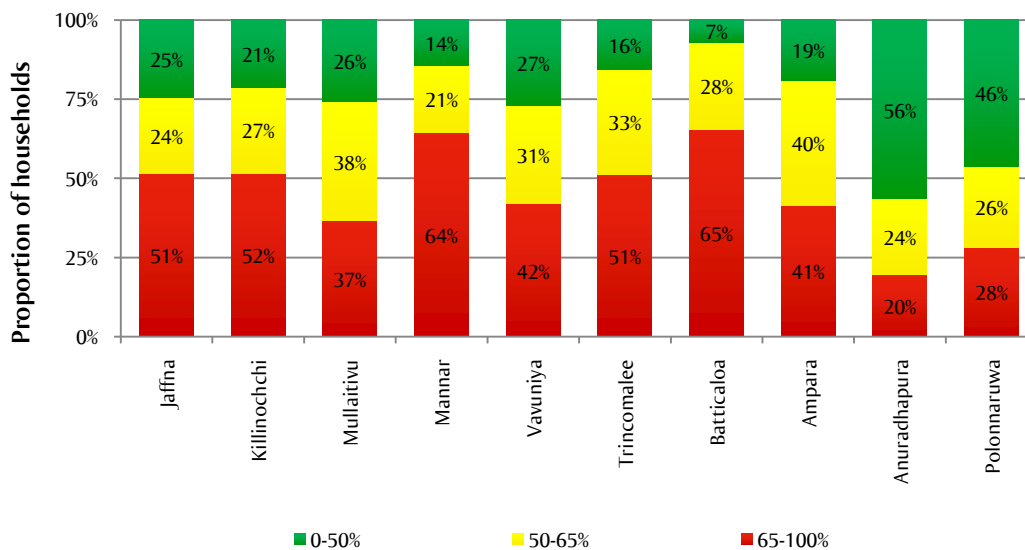


Figure 68 shows the proportion of households that spend less than half of their expenditures on food, households that spent 50-65 percent on food, and households that spent more than 65 percent of their expenditures on food. The most food insecure category devoting more than 65 percent of their expenditure to food accounted for a majority of the population of the 5 districts: Jaffna, Killinochchi, Mannar, Trincomalee and Batticaloa. These districts were also recipients of food assistance. It is thus assumable that without the food assistance the proportion of households spending more than 65 percent of their incomes on food would increase.

Figure 68 : Proportion of expenditure spent on food

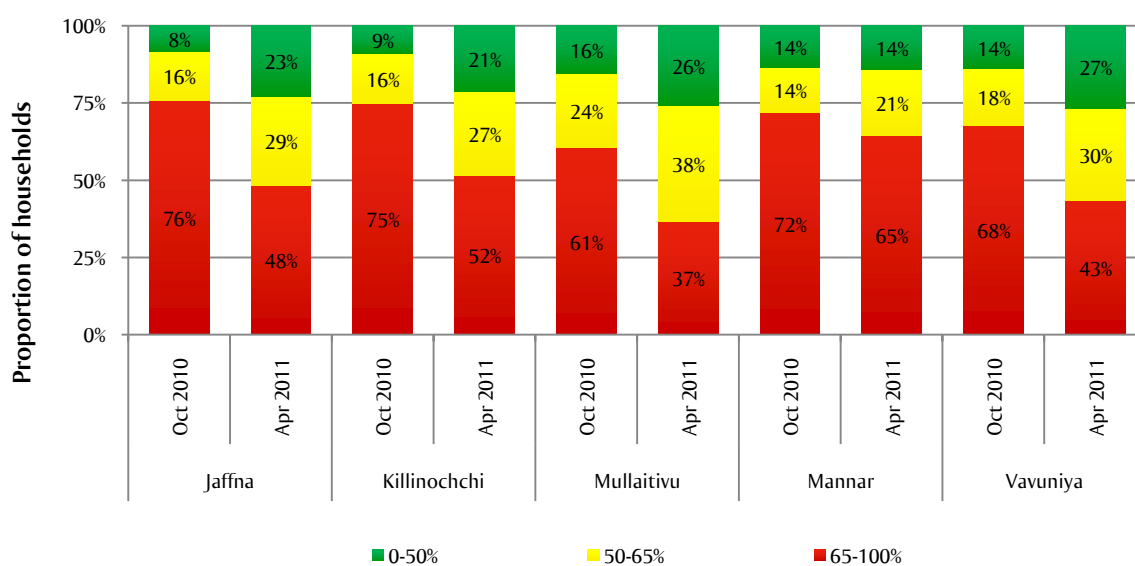


³⁰ Staple food are: rice, bread, hoppers, pulses (dhal and gram), fats (oil), vegetables, coconut products and sugar.

In recent months, incomes among returnees in the Northern Province have improved. Concurrently, as shown in Figure 69, a corresponding recovery in expenditure data had taken place. In all districts, the proportion of expenditures on food of the returnee population decreased from October 2010 to April 2011. This improvement was expected for two reasons: first, for many households, whether directly involved in agriculture or not, the harvest and post-harvest period is a time of relative prosperity. As income improvements allow for investments in livelihoods, health, education or other household priorities, the proportion of expenditure spent on food diminishes. Second, the recent harvest also meant that many households would be able to create food stocks from harvested crops and would not need to purchase food from the market.

As the assessments used here to compare data were not conducted at the same time of the year (October and March), it is difficult to determine whether the improvements followed normal seasonal patterns or whether the presented income situation was worse or better than it was last year.

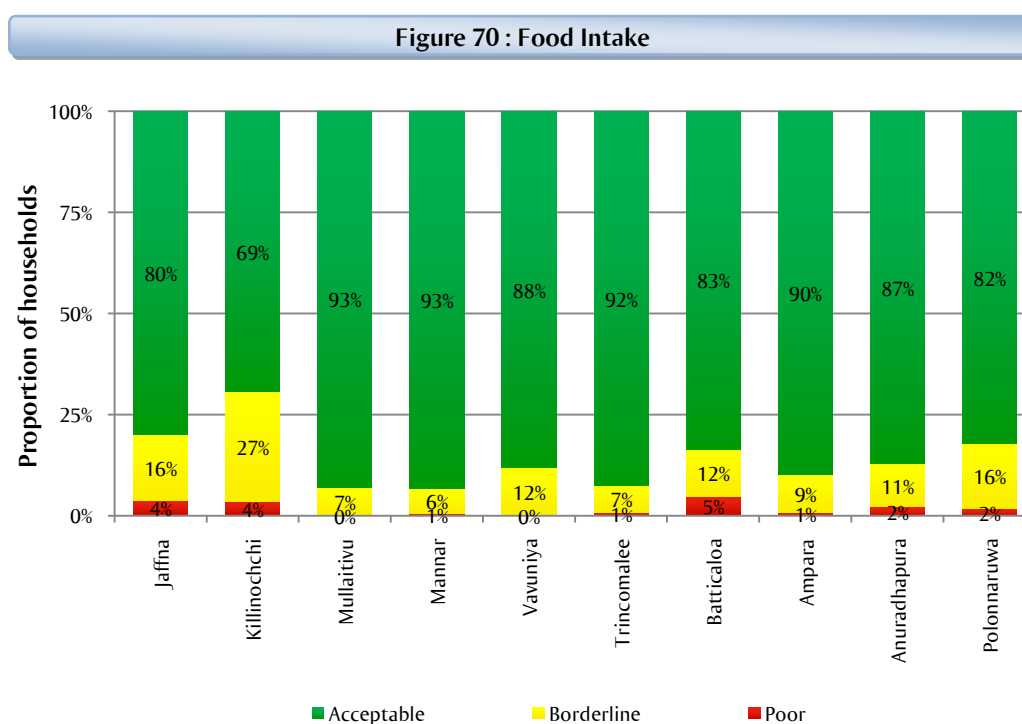
Figure 69: Proportion of expenditure spent on food, trend over time (returnee households only)



When asked about the change in expenditures over time, more than 95 percent of households said that expenditures were somewhat or much higher at the time of the assessment compared to the previous year. Food prices follow a similar pattern - an average of 98 percent of households perceived food prices to be somewhat or much higher at the time of the assessment compared to the previous year.

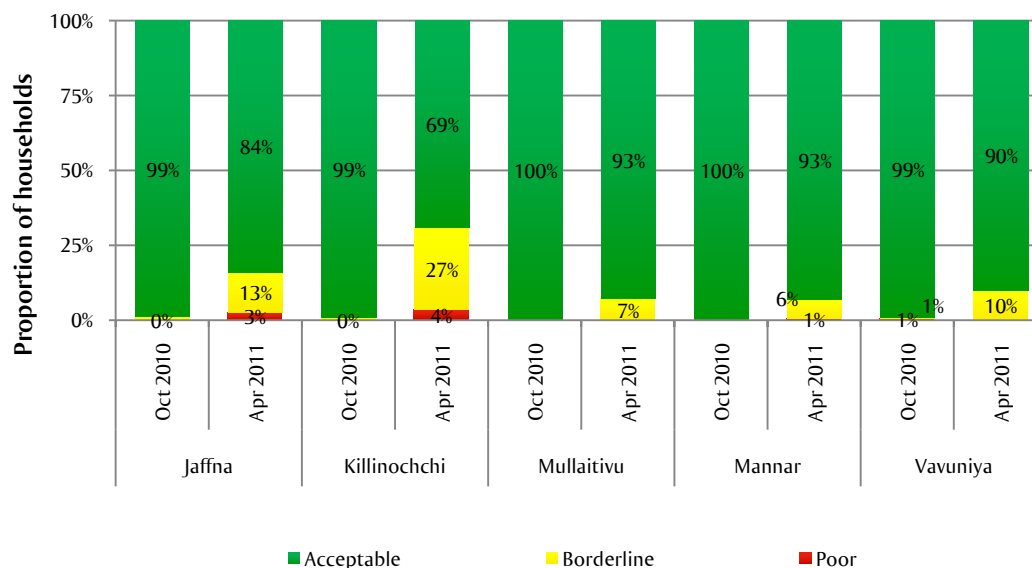
13 Food intake

Food intake is one indicator of extreme poverty and hunger, and a key indicator for WFP's determination of food insecurity and needs in populations. Following a globally standardized methodology for estimating the adequacy of food consumption at the household level, households have been classified as having poor, borderline or acceptable level of food consumption. The classification is based on the households' ability to consume a varied and adequately macro-nutrient diet. The analysis shows that large minorities in several districts have poor or borderline food consumption (see Figure 70). The situation in Killinochchi is a particular cause for concern. The districts of Anuradhapura and Polonnaruwa have surprisingly poor food consumption patterns when compared to the Eastern Province.



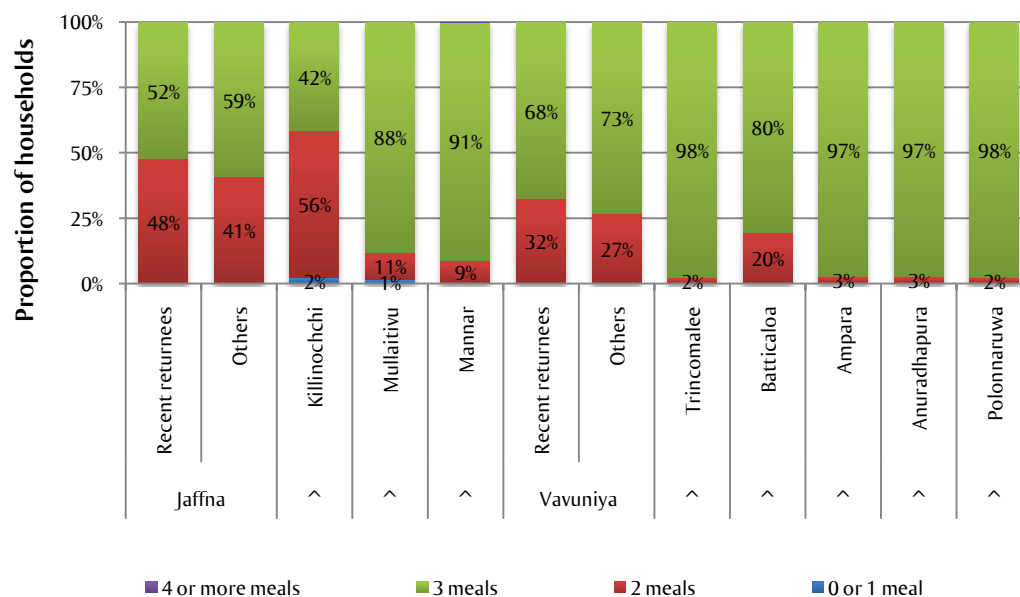
When comparing the (pre-harvest lean season) October 2010 assessment and the (post-harvest) April 2011 assessment, there are unseasonal deteriorations in food consumption patterns among the returnee population in all northern districts. From a situation in October 2010 when only about a dozen of the 1,700 surveyed households had an inadequate diet, the current situation is one where almost one in three in the worse off district is unable to reach acceptable food consumption levels. Food intake was expected to have improved because of increased household income. However, in actuality, food consumption has deteriorated. It is believed that this undesired trend is partly due to changes in humanitarian assistance, which will be discussed in some detail in the chapter on assistance.

Figure 71 : Food intake, trend over time (returnee households only)



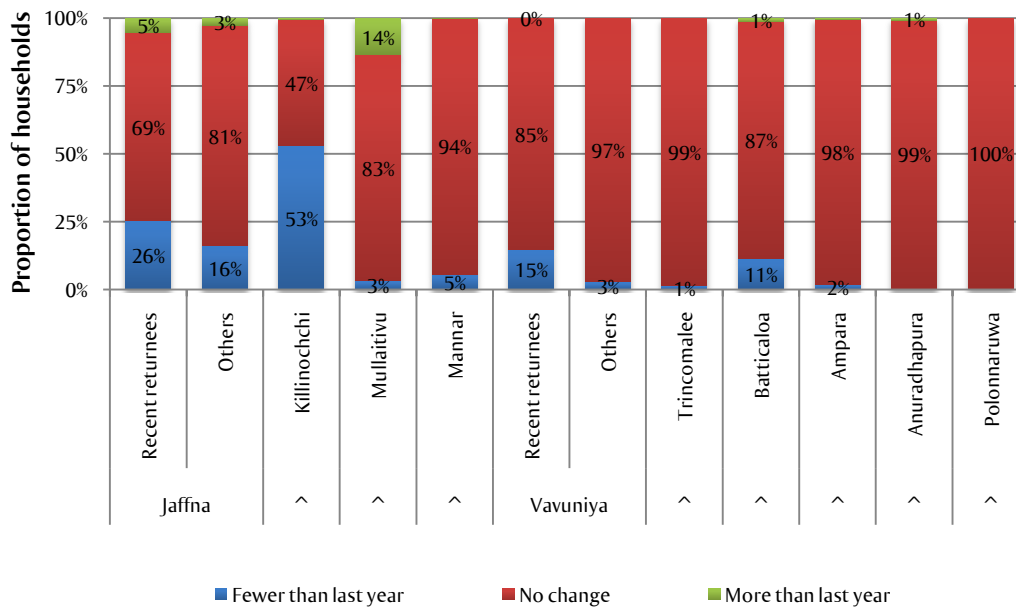
Meal frequency, pictured below in Figure 72 is consistent with household food consumption score described above. With the exception of Batticaloa, almost all households in the Eastern and North Central Provinces consume three meals per day -assumed to be adequate. The situation in the Northern Province is more mixed with a large proportion of households eating two meals. Three meals per day is considered normal in Sri Lanka and the practice of eating fewer meals in many places is a sign of food shortage.

Figure 72 : Meal Frequency



A considerable proportion of surveyed households in Jaffna, Killinochchi, and Batticaloa and among recent returnees in Vavuniya say that the number of meals eaten in a day has decreased compared with the same period in the last year.

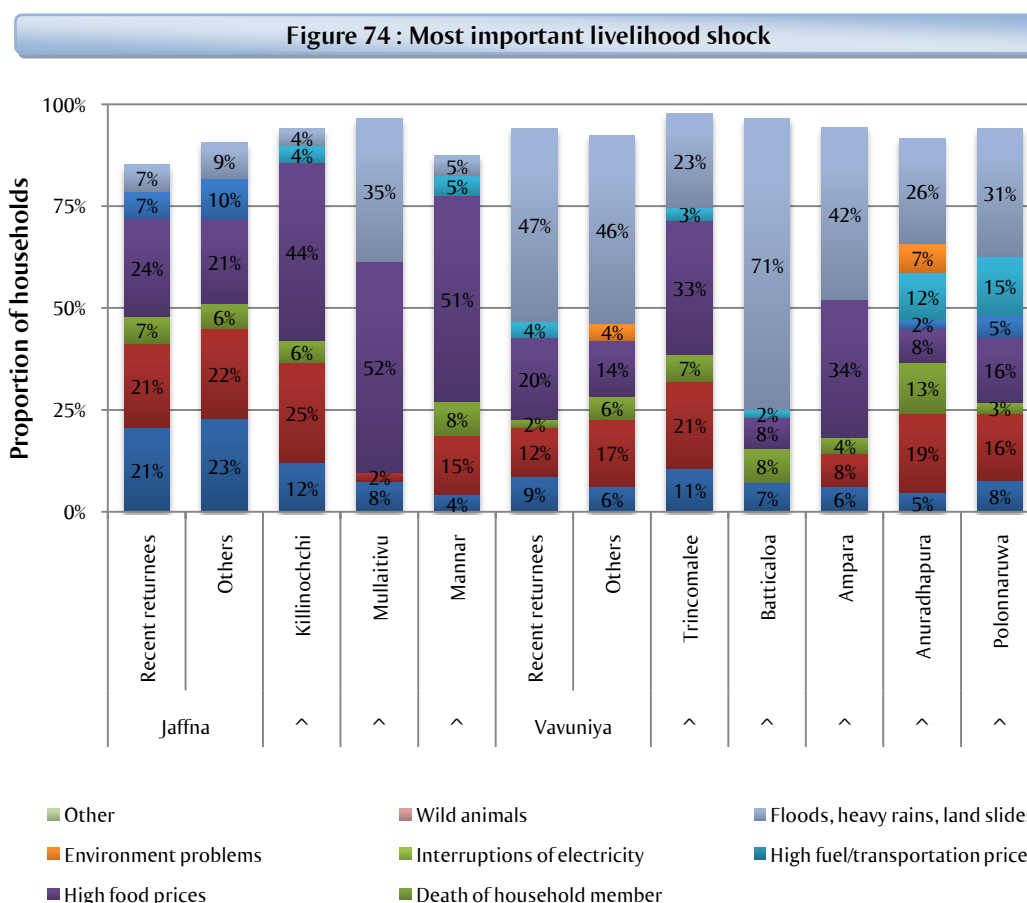
Figure 73 : Trends in the number of meals eaten per day



In conclusion, food intake had deteriorated for returnees in all districts in the Northern Province from October 2010 to April 2011. The food consumption situation in Killinochchi was particularly worrisome. The proportion of households eating less than 3 meals per day was larger in the Northern Province compared to the Eastern Province and Anuradhapura and Polonnaruwa. All study populations reported that the number of meals eaten per day had decreased from 2010 to 2011.

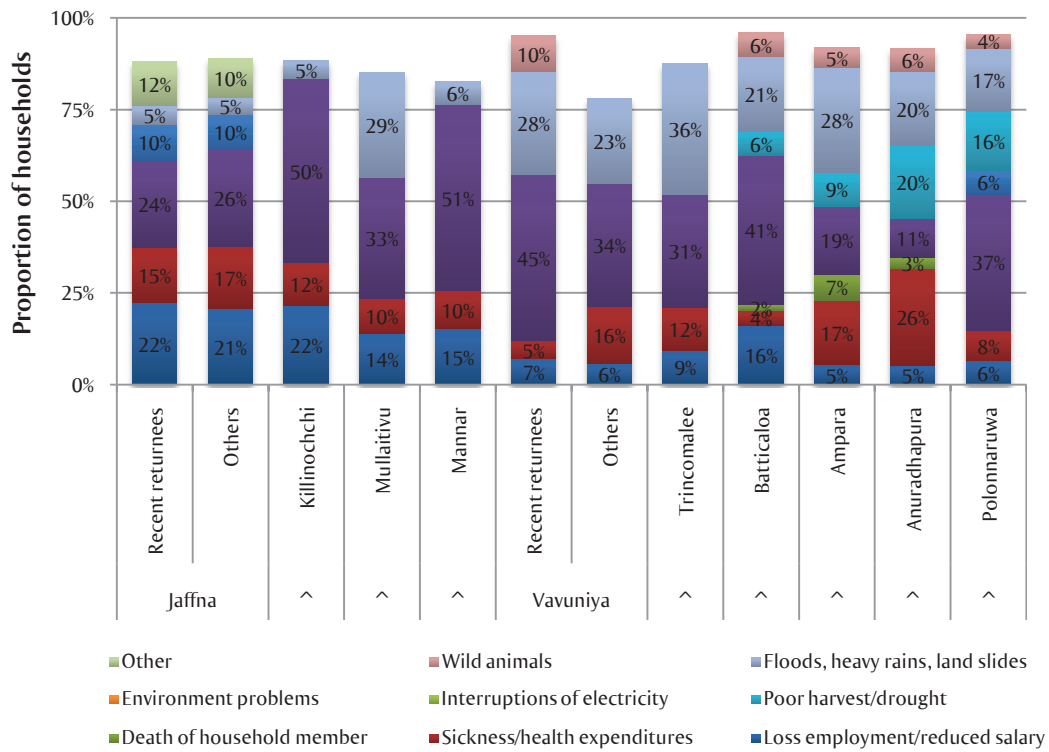
14 Livelihood shocks

Households were asked about the main difficulties or shocks faced in the last six months. High food prices were often perceived as the major shocks in all districts. Floods were also one of the main shocks faced by households especially in Eastern and North Central Provinces. In Batticaloa, 71 percent of households reported that floods were the prime cause of distress during last six months. Moreover, floods were the main shock for 47 percent of households in Vavuniya, 42 percent in Ampara, 35 percent in Mullaitivu and around 28 percent in the North Central Province. Unemployment (and low/reduced salaries) is an important difficulty in Jaffna, Killinochchi and Trincomalee.



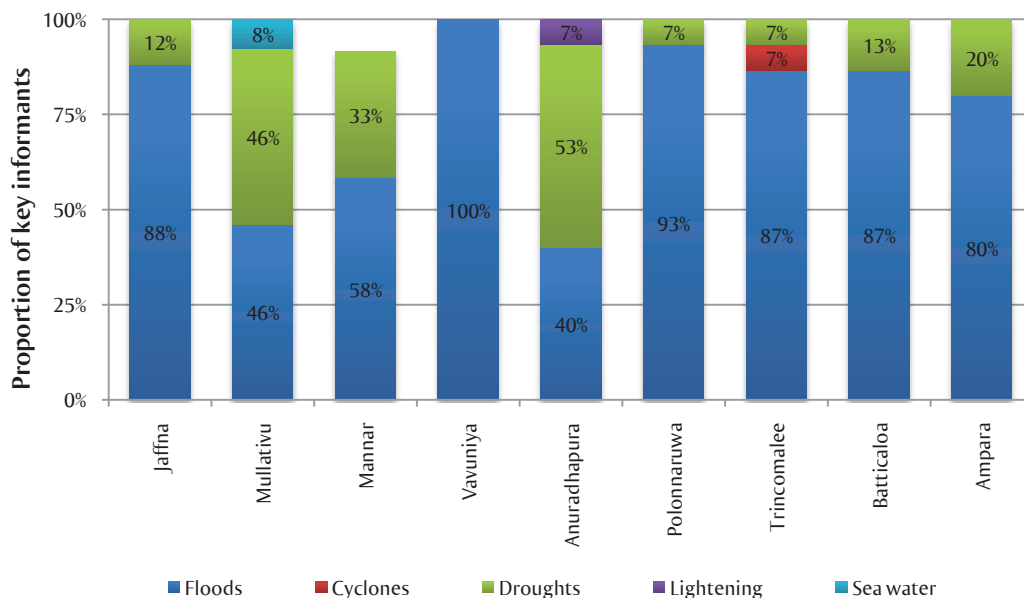
In a second step, households were asked to name the second most important livelihood shock affecting them. Results are displayed in Figure 75. High food prices are still the most commonly stated shock in all surveyed districts. Furthermore, floods, unemployment (or low/reduced salaries), high levels of health expenditures and debts were indicated by a major proportion of households as the second most important shock.

Figure 75 : Second most important livelihood shock



With regard to natural disasters, floods are most common in all three provinces. Nevertheless, droughts are also a major problem, particularly in Mullaitivu, Anuradhapura and Mannar: In these three districts, more than 30 percent of key respondents outlined that droughts are the most common natural disaster in their area. In Trincomalee, seven percent of key respondents perceived cyclones to be the main danger; in Mullaitivu, 8 percent asserted that sea water imposes the major risk. In Anuradhapura, 7 percent outlined that lightning is also a frequent natural disaster.

Figure 76 : Natural disasters faced during last five years



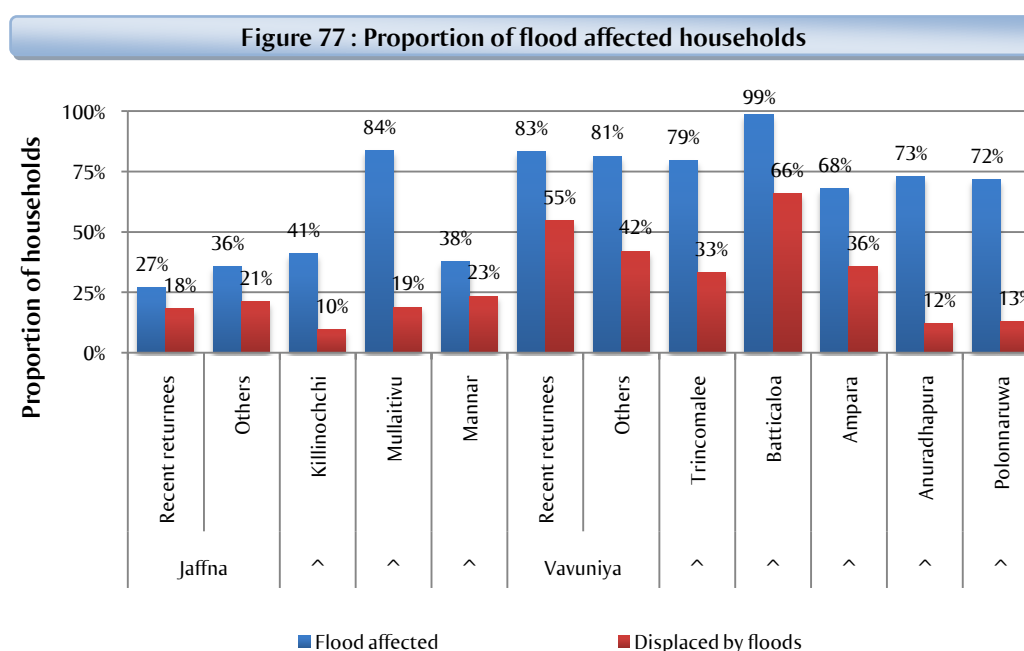
15 Flood impact

The North-East monsoon rains began in mid-November 2010 resulting in severe precipitations in Northern, Eastern, North Central, Central and North Western Provinces. The rainfall re-intensified in December and January leading to heavy flooding, limited physical accessibility, severely damaged crops and major displacement. Lives and livelihoods of an estimated 1 million persons were affected. The 12 districts of Batticaloa, Anuradhapura, Monaragala, Nuwara Eliya, Kandy, Trincomalee, Ratnapura, Matara, Killinochchi, Polonnaruwa, Mullaitivu and Ampara are flood affected at varying degrees. The impact was felt particularly hard in the East of the country, specifically in Ampara, Batticaloa, Trincomalee and Polonnaruwa districts. Anuradhapura district was also badly affected. Rainfall continued until the 12th January in the two worst affected districts, Batticaloa and Ampara. Returnees from the North, previously displaced by conflict and currently resettling in the eastern part of the country are of particular food security concern. The fragility of their livelihoods makes them exceptionally vulnerable to the current floods.

15.1 General impact

This survey found that Batticaloa was the district where the largest proportion of households (99 percent) reported to have been affected by floods at some time between November 2010 and February 2011, followed by Mullaitivu, Vavuniya and Trincomalee (79-84 percent of respondents), Anuradhapura, Polonnaruwa and Ampara (68-73 percent of households). This effect was not always dramatic, but ranged from making it impossible for income earners to get to work for a few days to a complete wipeout of livelihoods. This chapter will explore the severity of flood impact on life and different kinds of assets.

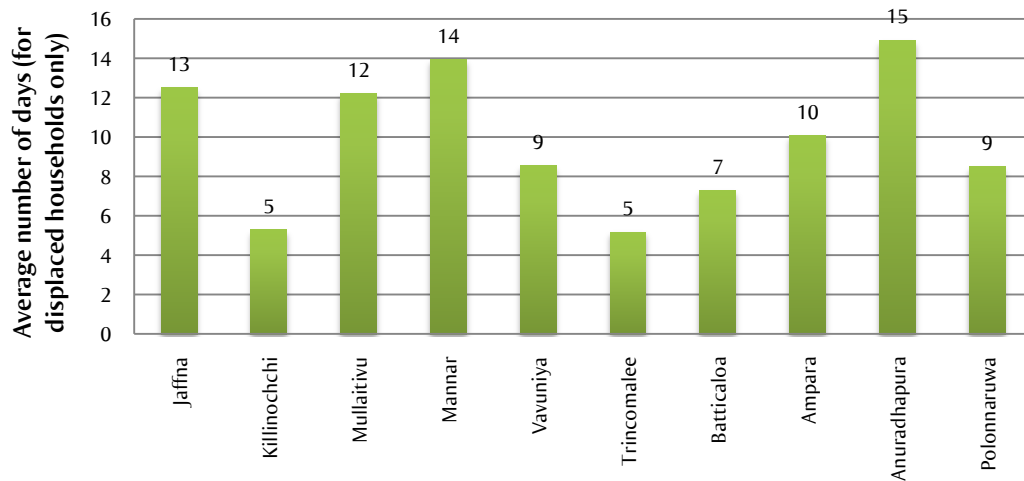
Sixty-six percent of households in Batticaloa were displaced from their homes. In Vavuniya, Ampara and Trincomalee over a third of households were displaced.



Most displaced families (57 percent) found refuge in organized camps. Access to camps was particularly good in Trincomalee and Batticaloa where more than 74 percent of the displaced went to camps. Most others, 37 percent of all displaced in all sampled district, went to live with friends or families during the floods.

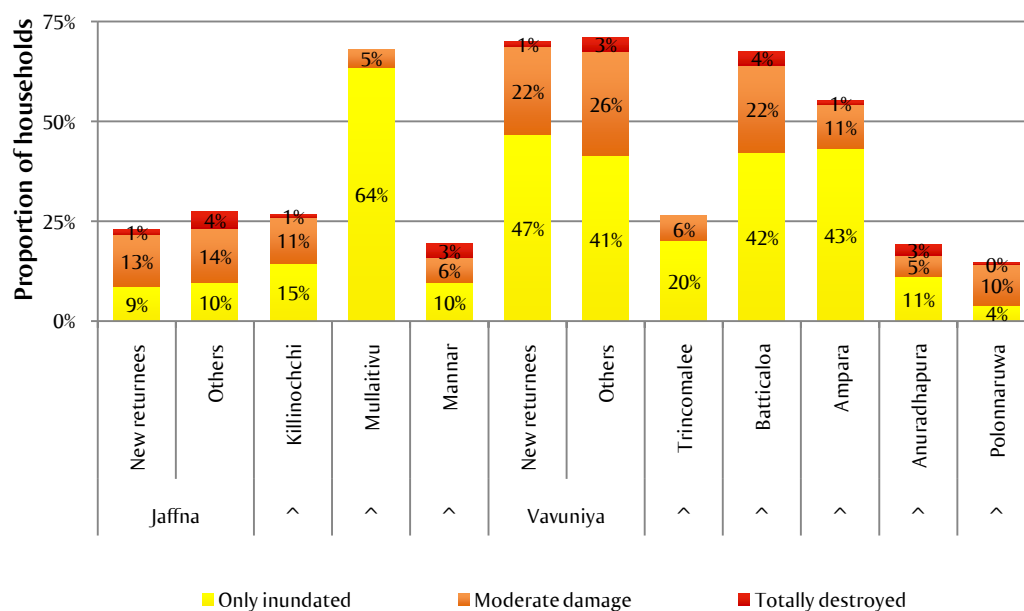
For those forced to leave their homes, the duration of displacement was not always long. In the four districts with the largest proportion of displaced households the average duration of displacement was 10 days or less. Only 12 percent of displaced households were away from their homes for more than 15 days.

Figure 78 : Average number of days of displacement due to floods



At the household level, the floods caused severe damage to housing and livelihoods. Housing damage was worst in Vavuniya, Batticaloa, Mullaitivu and Ampara, where a majority of surveyed households reported that their homes were affected by flooding. The average household in Vavuniya and Batticaloa with flood affected housing reported that it would take just over 3 months to fully repair the damages.

Figure 79 : Housing damage due to floods



The level of damage to livelihoods (below) is more even across the Eastern and North Central Provinces compared to damage to housing (above). Batticaloa and Vavuniya have the largest proportion of livelihood affected households and also the largest segment of households who reported that their livelihoods were completely destroyed by the floods. The districts of Trincomalee, Polonnaruwa, Ampara, Mullaitivu and Anuradhapura also reported high level of livelihood destruction.

The longest livelihood recovery time was reported in Vavuniya and Polonnaruwa, where the average estimate for the time required to fully re-establish livelihoods was 7 months. The second longest recovery time was found in Killinochchi, Anuradhapura and Batticaloa with 4 to 5 months. The average for other districts was 1 to 3 months and the average for the entire sample 4 months.

Figure 80 : Impact of floods on livelihoods

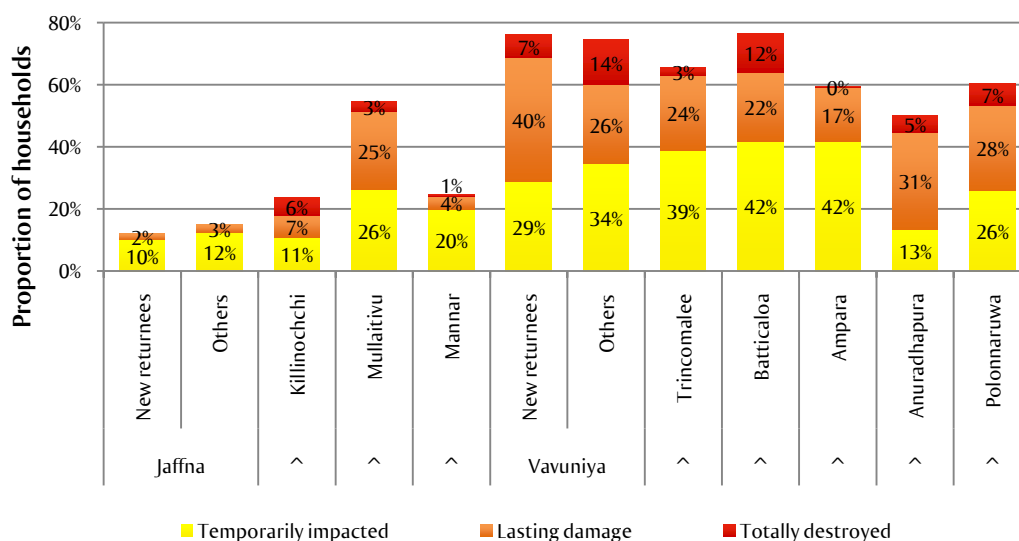
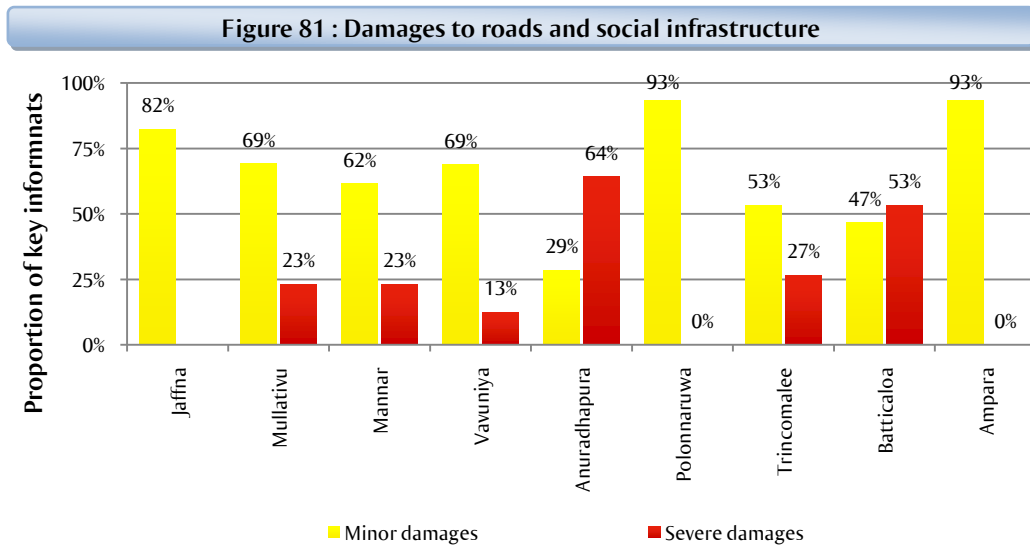
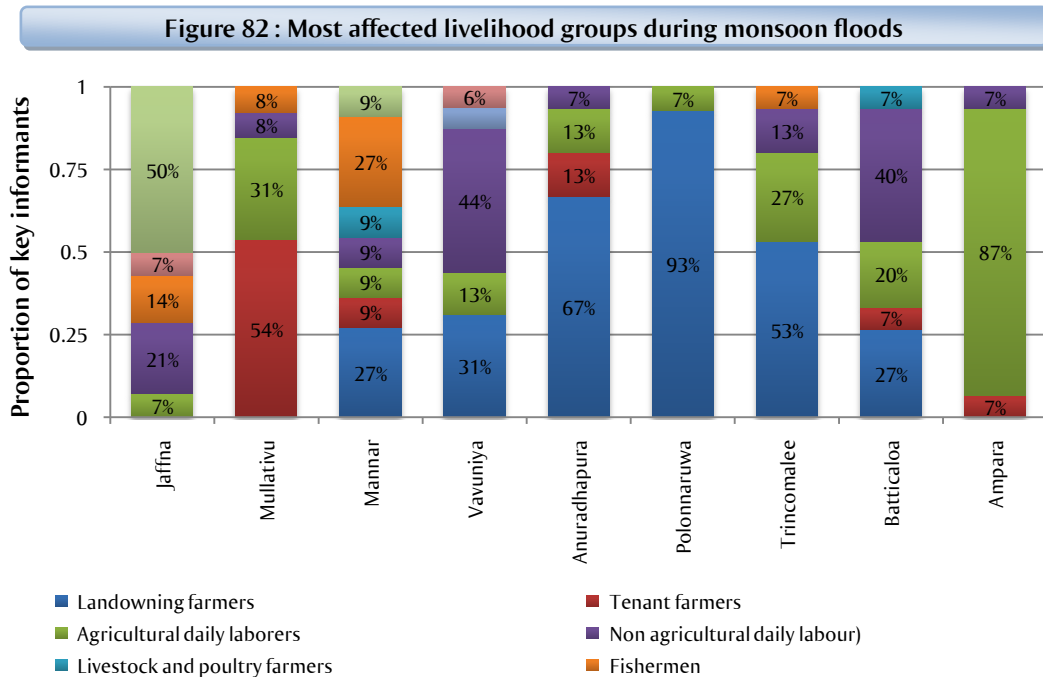


Figure 81 shows the damages to roads and social infrastructures due to floods in all districts. More than half of the key respondents surveyed in Anuradhapura and Batticaloa stated that the damage to the roads and social infrastructure was severe. Severe damages to infrastructure, but to a lower extent, were also reported in Vavuniya, Mannar, Mullaitivu and Trincomalee.



During the monsoon floods, landowners seemed to be the most affected livelihood groups, especially in the North Central Province, Vavuniya, Mannar and Trincomalee. Key informant data indicated that tenant farmers and agricultural/ non agricultural daily wage laborers were also very much affected by the floods.



15.2 Farming

Recent monsoon floods resulted in more damages to the irrigation structures in all the districts in Northern, Eastern and North Central provinces except in Jaffna.

According to the Key respondents, Major damages for paddy cultivation have been experienced by 40 to 50 percent of the clusters in Anuradhapura, Mannar and Ampara districts.

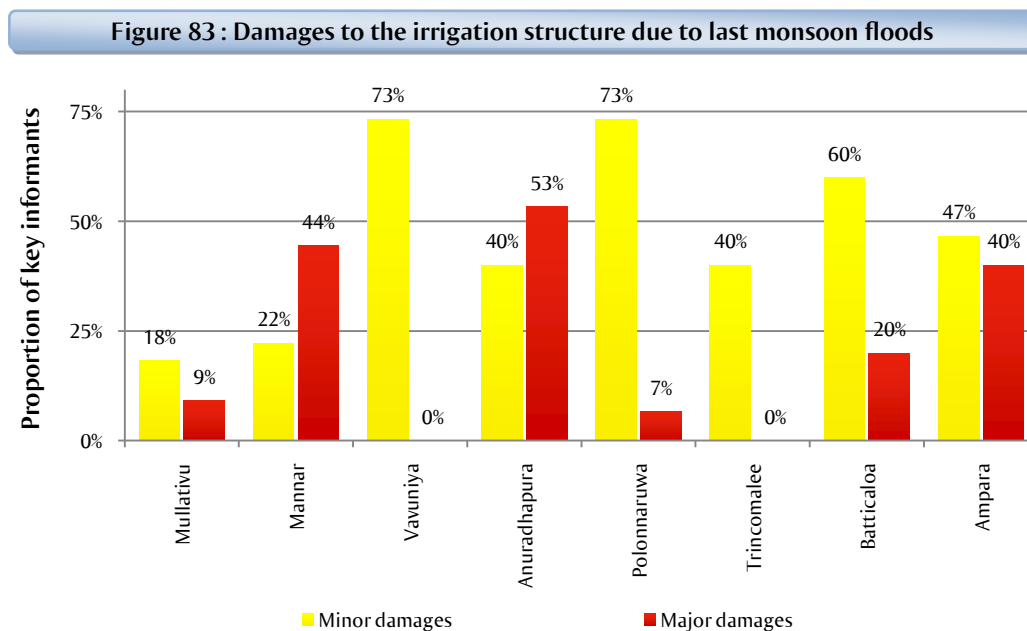
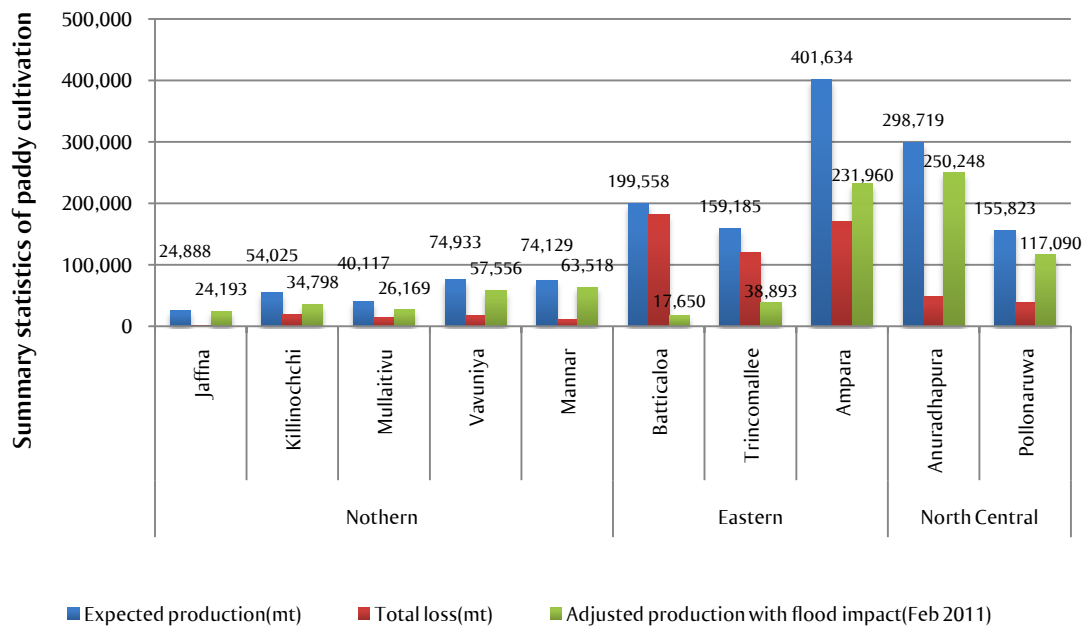


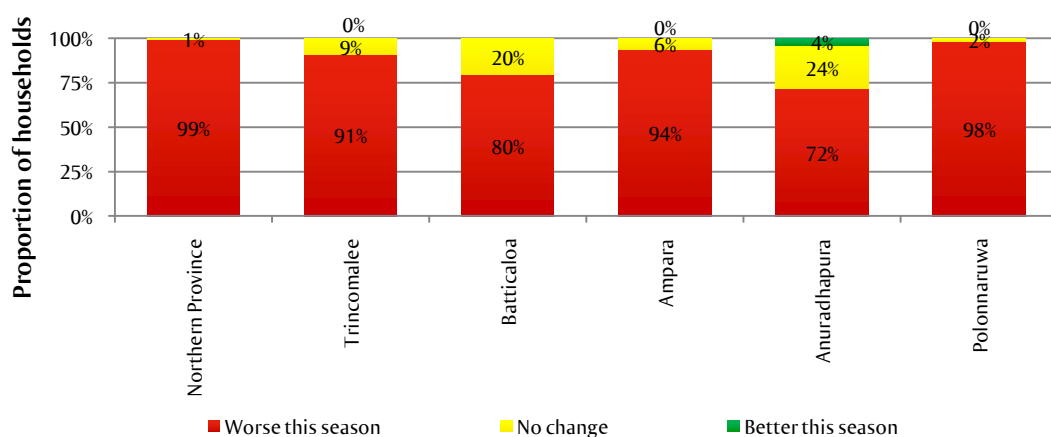
Figure 84 shows the paddy production and flood damage estimates for the studied three provinces. Batticaloa is the worst affected district in which 91 percent of the expected production has been lost due to floods; in Trincomalee it was 76 percent of the paddy production. In the district of Ampara which is the largest paddy cultivating district in Sri Lanka, 42 percent of its expected production was lost. Overall, the Eastern Province has been severely affected by floods leading to more than a 70 percent loss of paddy production. The percentages of paddy harvest loss in Killinochchi, Mullaitivu, Vavuniya, Mannar are 36 percent, 35 percent, 23 percent and 14 percent respectively. Jaffna is reported to be the least affected district out of the three provinces.

Figure 84 : Paddy cultivation progress and damage due to floods in *maha* season 2010/11³¹



To estimate the medium and long-term impact of the floods on paddy cultivation, households were asked about their opinion on the quality of paddy – whether they believe the quality has improved, remained equal or worsened in *maha* 2010/11 season compared to the last *maha* season (2009/10). Almost all households in the Northern Province (99 percent) asserted that it has become worse in this season. The vast majority in the other districts also agreed with this statement. In Batticaloa and Anuradhapura, however, at least 20 percent of households stated that they perceive no change in the quality of paddy. It was only in Anuradhapura where some households claimed that the quality improved; however, the proportion amounted to 4 percent of all households. Overall farmers perceived the quality of paddy to have worsened; nevertheless, it seems that in Anuradhapura as well as in Batticaloa the perception of the quality of paddy was slightly better than in other districts.

Figure 85 : Comparison of the quality of paddy of this season with that of the last *maha* season



³¹ Source: Crop forecast, March 2011

Regarding the overall land cultivation conditions, key respondents provided interesting insights which were quite different from the perspectives on the quality of paddy land. While more than half of the key respondents in the North asserted that conditions for cultivation improved this year compared to last year, at least 40 percent of key respondents in the North Central Province and Trincomalee suggested that conditions have worsened. In Ampara, conditions seem to have remained fairly constant while most key respondents said that in Batticaloa they had improved.

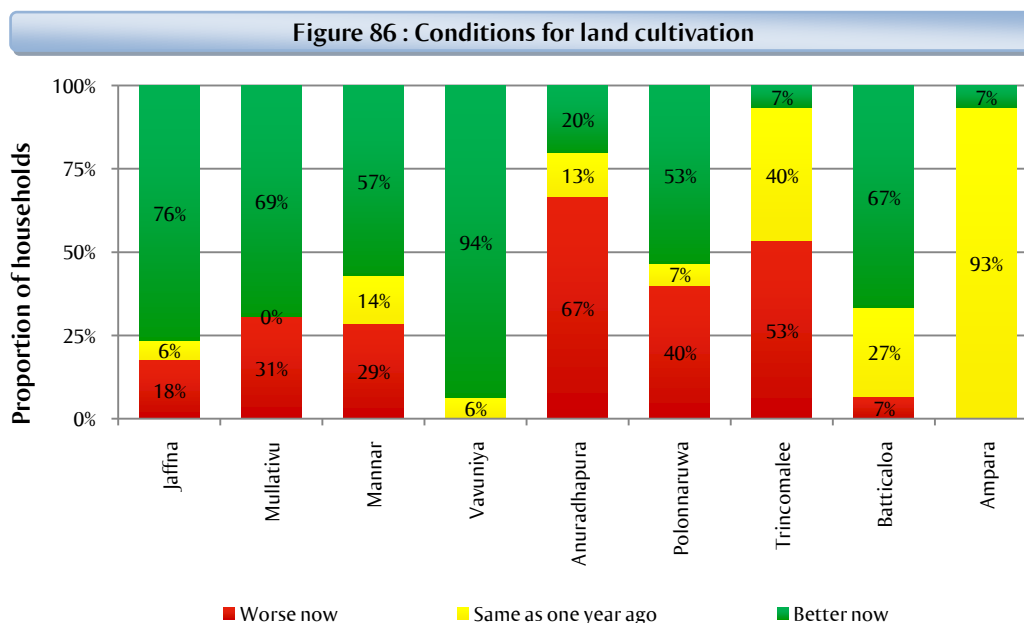
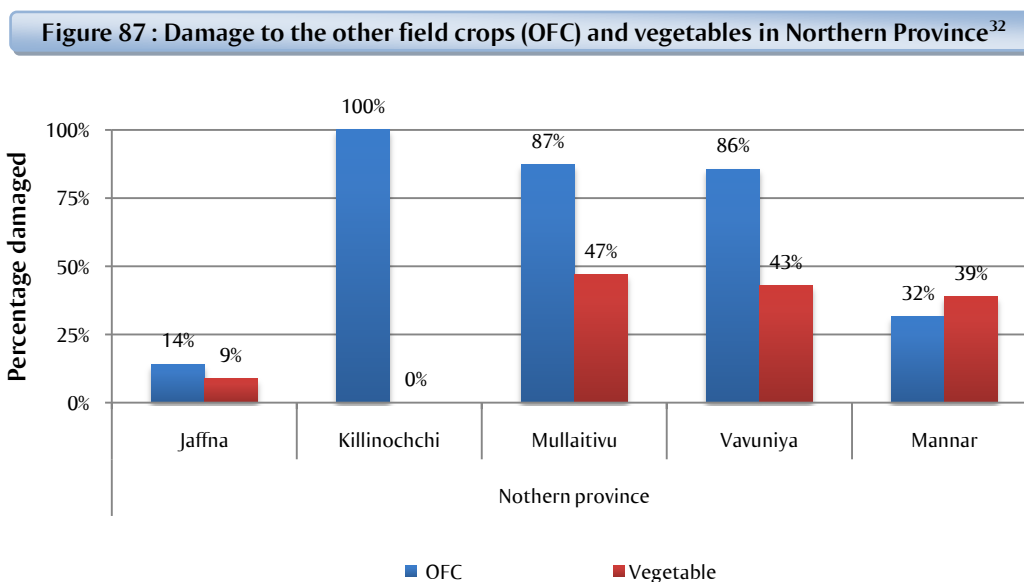


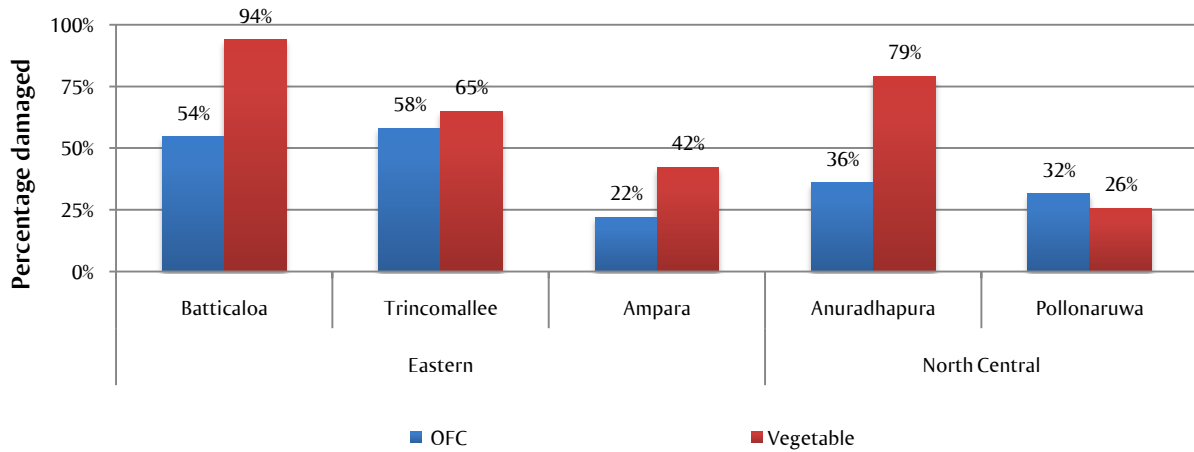
Figure 87 shows the impact of the monsoon floods from October 2010 to February 2011 for other field crops (OFC) and vegetables in the Northern Province. Killinochchi was the worst affected district where all OFC cultivations were damaged. Eighty-seven percent in Mullaitivu and 86 percent of OFC cultivation in Vavuniya had been damaged. Damage on vegetable cultivation was also reported to be high in Mullaitivu, Vavuniya and Mannar.



³² Source: Crop forecast, March 2011

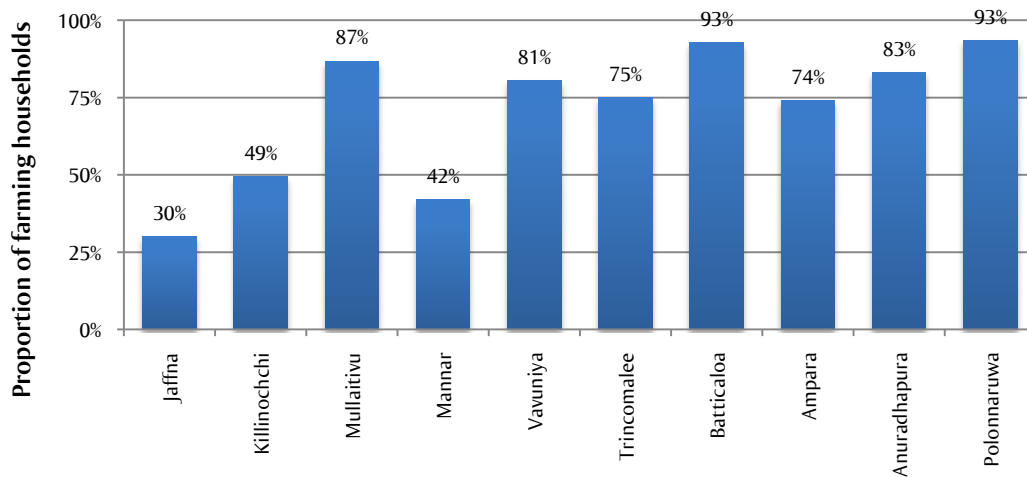
Figure 88 shows the damage for OFC and vegetables in the Eastern and North Central Provinces. Batticaloa was the most affected district where more than half of the OFC and almost the entire vegetable cultivation were affected by floods. Furthermore Figure 88, depicts that the OFC and vegetable cultivations in all other districts were also affected by floods.

Figure 88 : Damage to the other field crops (OFC) and vegetables in Eastern and North Central Provinces³³



The proportion of farmers who reported crop losses was largest in Batticaloa and Polonnaruwa. It amounted to over 80 percent of farming households.

Figure 89 : Proportion of farming households that suffered crop losses

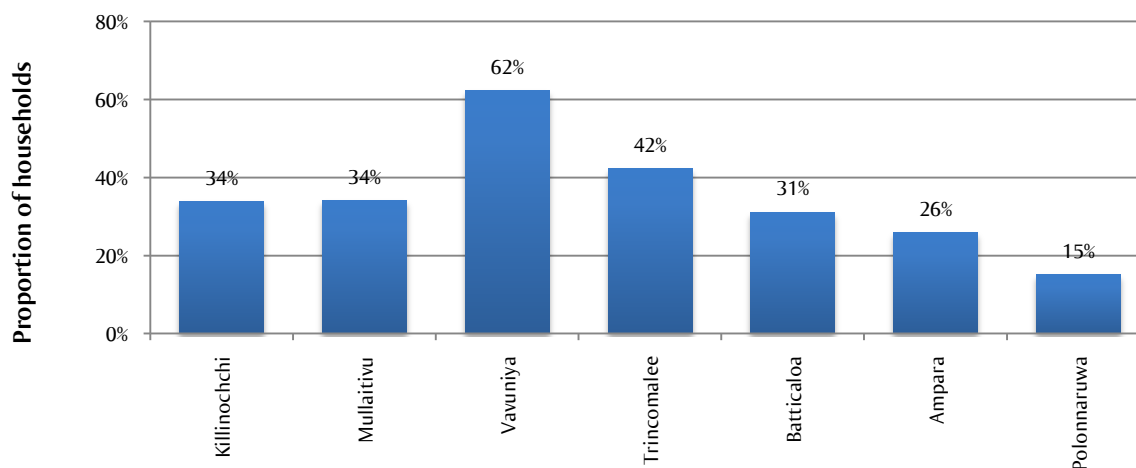


³³ Source: Crop forecast, March 2011

15.3 Livestock

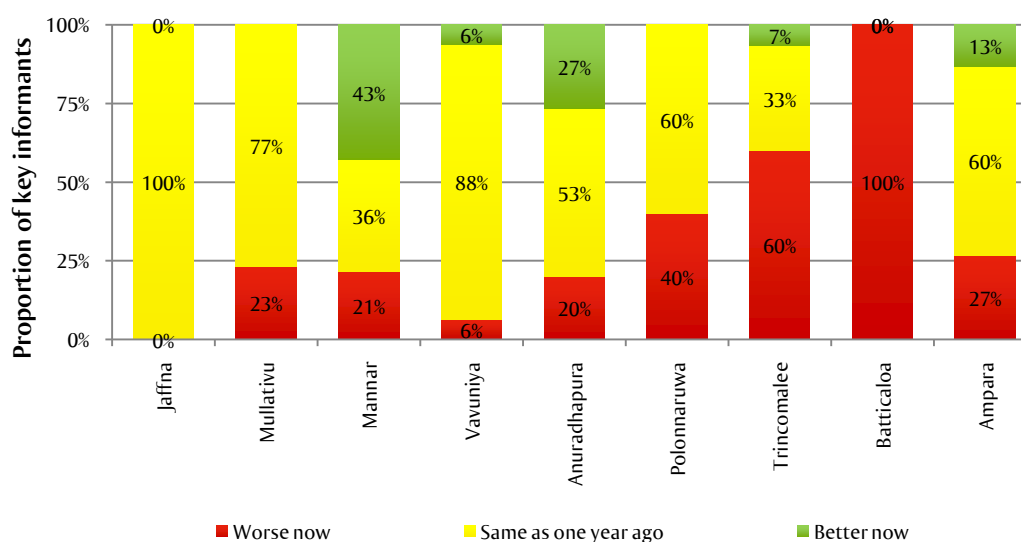
Of all livestock owning households, most reported losses in Vavuniya and Trincomalee, 59 percent and 42 percent respectively. Overall, the North and the East Provinces seem to have been worst affected.

Figure 90 : Proportion of livestock owning households that suffered livestock losses due to floods



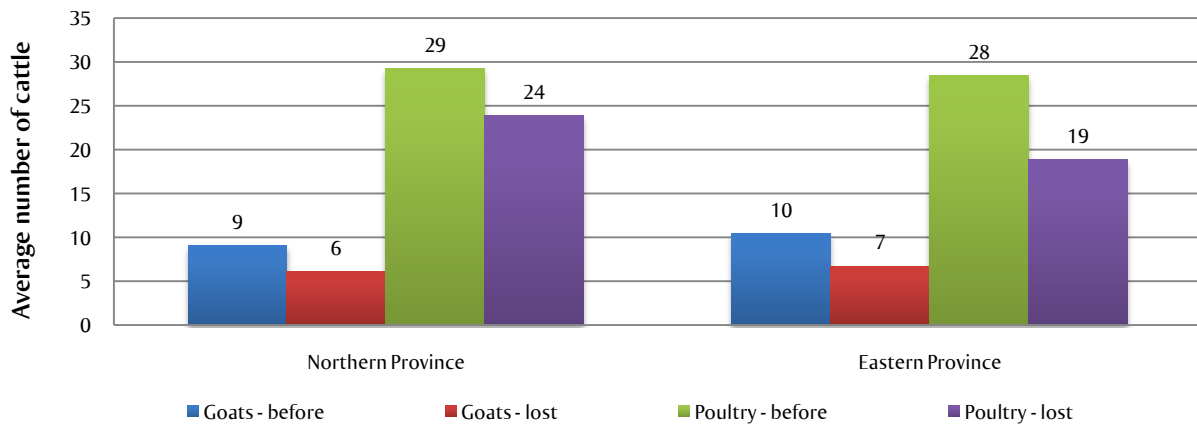
According to key respondents, conditions for livestock in all districts except Mannar, Trincomalee and Batticaloa have on average remained the same from last year to this year. In Trincomalee and Batticaloa, however, conditions have deteriorated as stated by more than half the key respondents. The development of the conditions for livestock raising is unclear in Mannar, where 43 percent asserted that conditions have improved while 21 percent claimed they have worsened.

Figure 91 : Conditions for livestock



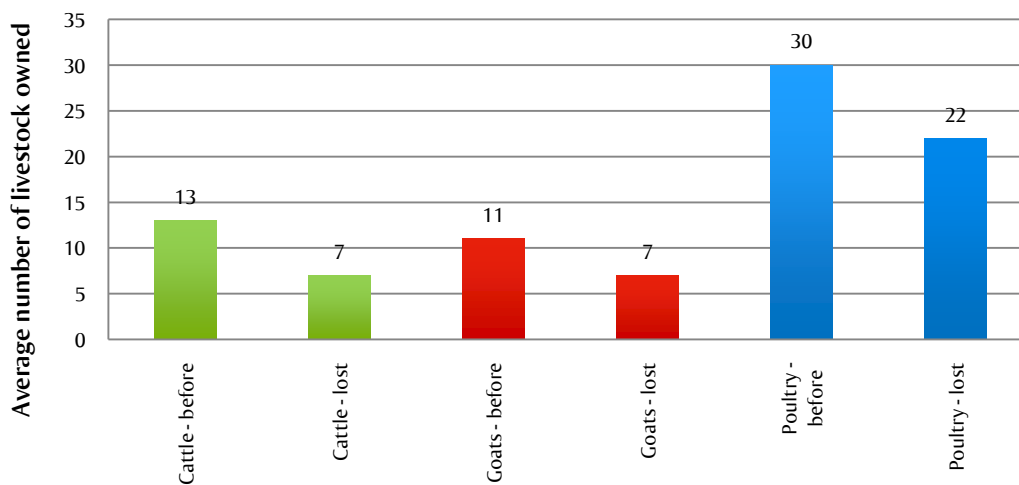
When comparing the average number of livestock, livestock owning households that suffered losses due to the floods reported that they had 10 goats on average, before the floods while this number fell by 7 goats due to the floods in the North and East Province. The number of poultry was 29 on average before the floods and losses amounted to 19 in the Eastern Province. In the Northern Province, the loss of poultry seems to have been even more drastic: while households reported owning poultry - 32 on average- its meant losses were at 25.

Figure 92 : Comparison of average number of goats and poultry of flood affected households, by province



Across provinces, the percentage loss of livestock was highest for poultry; the livestock owning households that reported having lost poultry on average lost 73 percent of their poultry. For goat owning households, the mean losses amounted to 64 percent of goats and for cattle owning households, 43 percent of cattle.

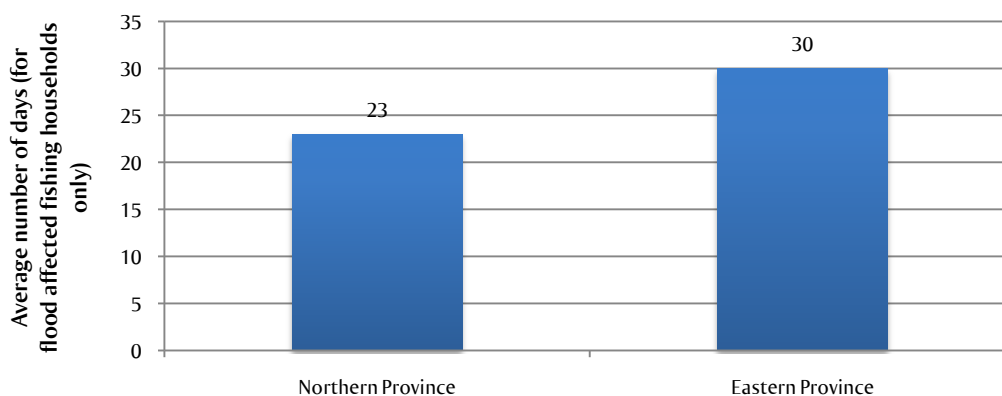
Figure 93 : Average decrease in number of livestock for flood affected households



15.4 Fishing

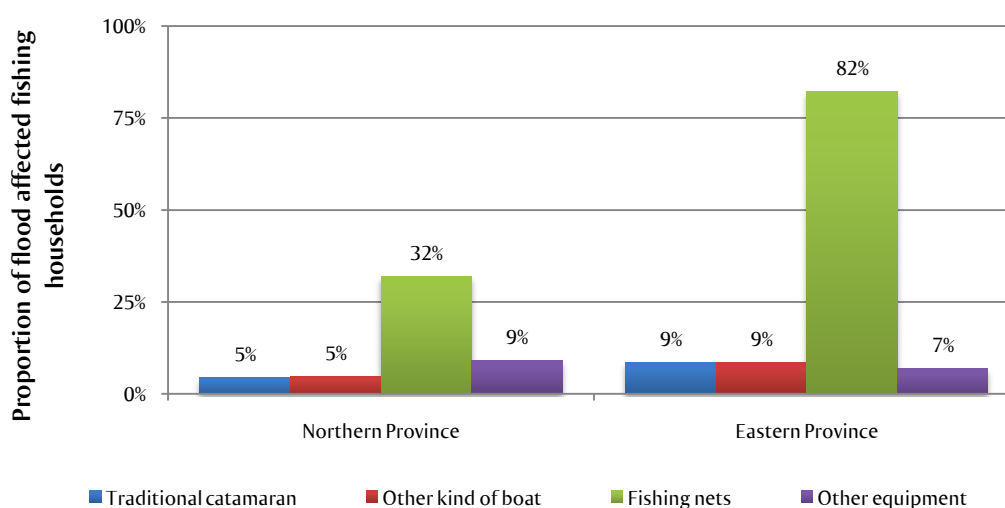
Fifty nine percent of all fishing households in the Northern Province and 70 percent of fishing households in the Eastern Province reported having suffered losses due to the floods. For the fishing households that did suffer the impacts, the average duration during which they could not fish amounted to 23 days on average in the Northern Province and 30 days in the Eastern Province.

Figure 94 : Average number of days during which fishing was interrupted



Of all the households that have suffered fishing losses, a vast majority of households in the Eastern Province, 82 percent and 32 percent of households in the Northern Province reported having lost fishing nets. In the Eastern Province 9 percent and in the Northern Province 5 percent of these households reported having lost a catamaran or other kinds of boats. Nine percent in the Northern Province also stated that they had lost other equipment. In the Eastern Province, the proportion of households who lost their other equipment was only 7 percent.

Figure 95 : Loss of fishing equipment due to floods

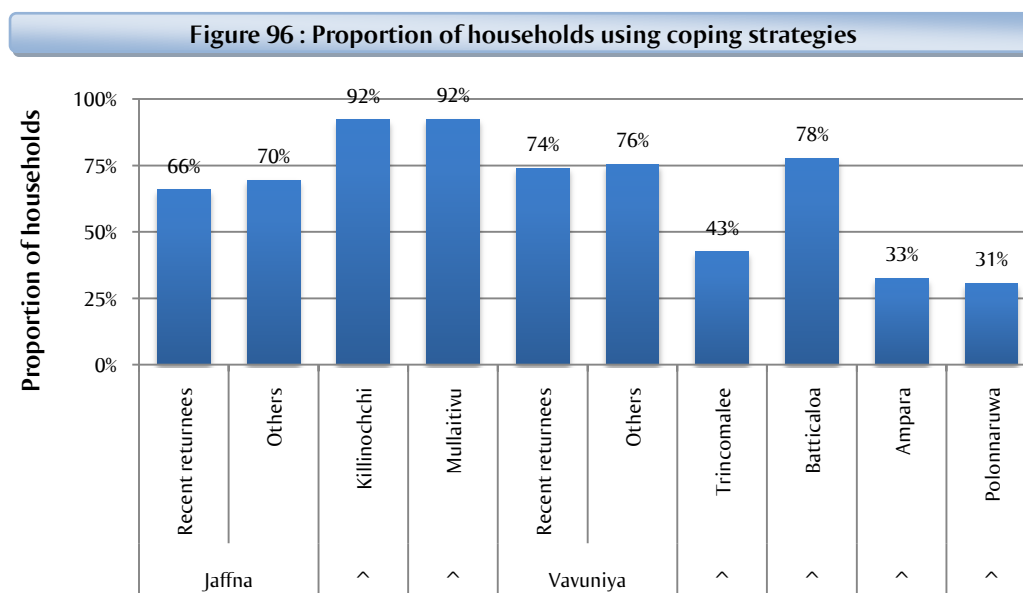


In summary, the Eastern Province as well as Vavuniya, Mullaitivu and the North Central Province were most affected by the floods – in all of these areas, livelihoods were strongly affected. In Batticaloa and Vavuniya, a high proportion of households were also destroyed or displaced due to the floods.

With regard to farming households, in the Eastern and North Central Province, a large amount of paddy production was lost and most households reported that the quality of paddy had worsened. Vegetables and other field crops were lost in all three provinces; however, the flood impact in Jaffna was lowest. Similarly, many livestock raising and fishing households asserted that they had lost livestock or fishing equipment.

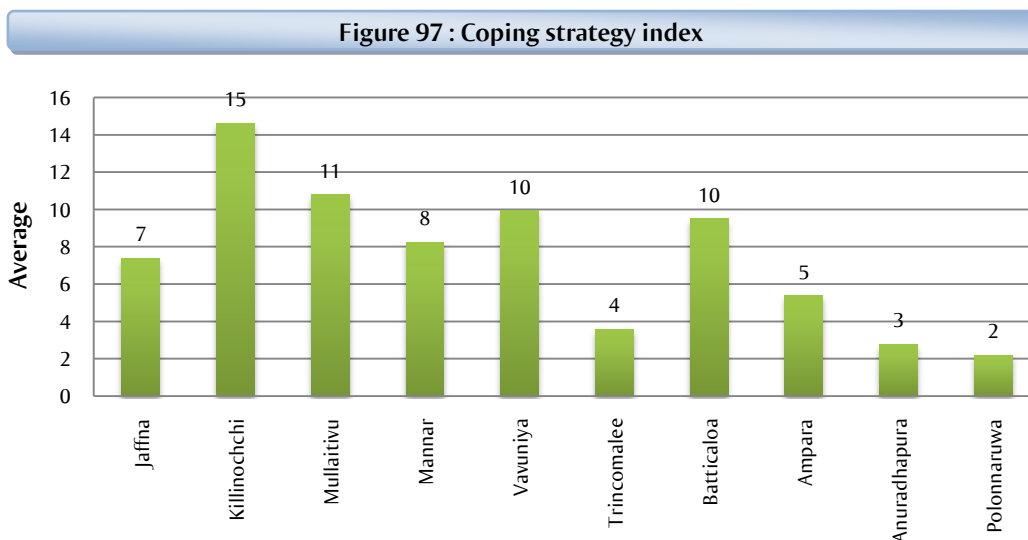
16 Coping strategies

Due to low income and limited food resources, a large proportion of households reported to have adopted coping strategies. Markedly, in Mullaitivu and Killinochchi 92 percent of all households utilized coping strategies; in Jaffna, Vavuniya and Batticaloa it was more than 70 percent of households. In the other Eastern Province districts as well as in the North Central Province, the proportion accounted for around 30-40 percent of households.



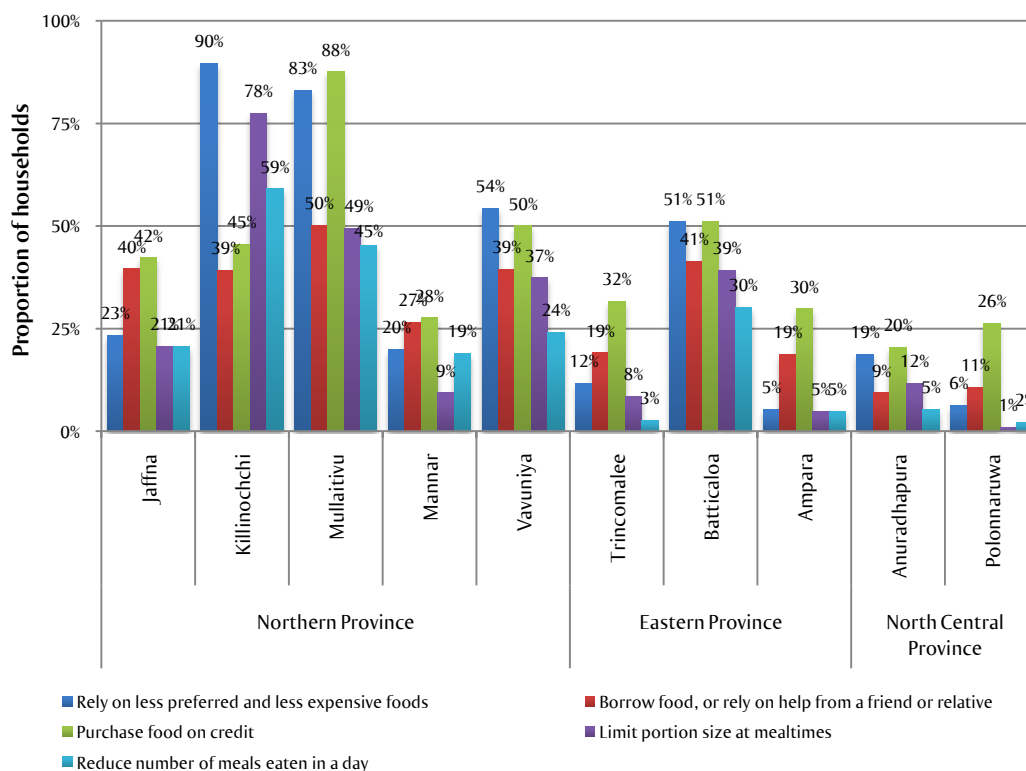
In order to get a better understanding of coping management and the severity of applied coping strategies, a coping strategy index was established³⁴. Coping strategies were weighted according to their severity and a coping index created based on the frequency and severity of coping strategies adopted. It is apparent that in Mullaitivu, Killinochchi, Vavuniya and Batticaloa the applied coping strategies are most severe or adopted most often. In these 4 districts, the index amounts to 10 or more. In contrast, in the North Central Province as well as Trincomalee, coping strategies are less severe or less frequently applied.

³⁴ The calculation of the index followed WFP guidelines for the reduced coping strategy index



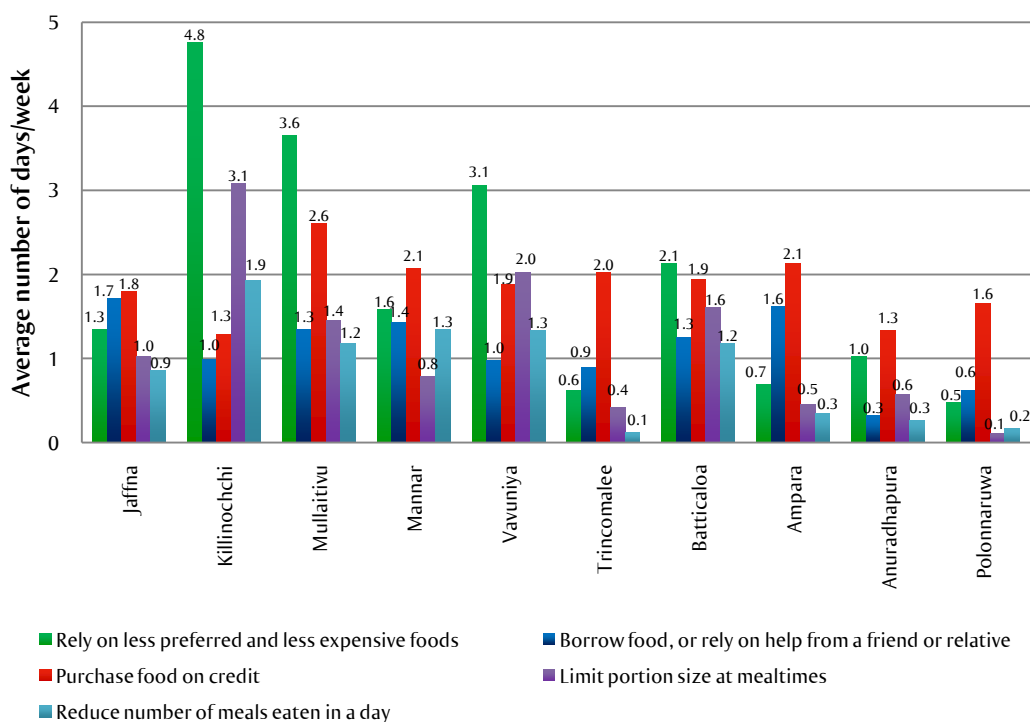
More specifically, in the four districts at hand the majority of households reported relying on less preferred and inexpensive foods. Moreover, in Killinochchi almost 80 percent of all households limited the quantity of intake at mealtimes and 59 percent reduced the number of daily meals. Overall, in the North Central Province, the Eastern Province (except for Batticaloa) as well as in Mannar, the proportion of households adopting coping strategies is noticeably lower than in other districts. In these areas, the most common coping strategy was food purchasing on credit – it accounted for around 30 percent of all households. It is interesting to note that households in Polonnaruwa and Ampara adopted less severe coping strategies. For instance, less than 5 percent of households used to reduce the number of daily meals. This might imply a higher level of well being and higher food security; it is also consistent with findings in other sections which illustrate a comparatively higher wealth in the North Central and Eastern Province compared to the Northern Province.

Figure 98 : Proportion of households pursuing individual coping strategies



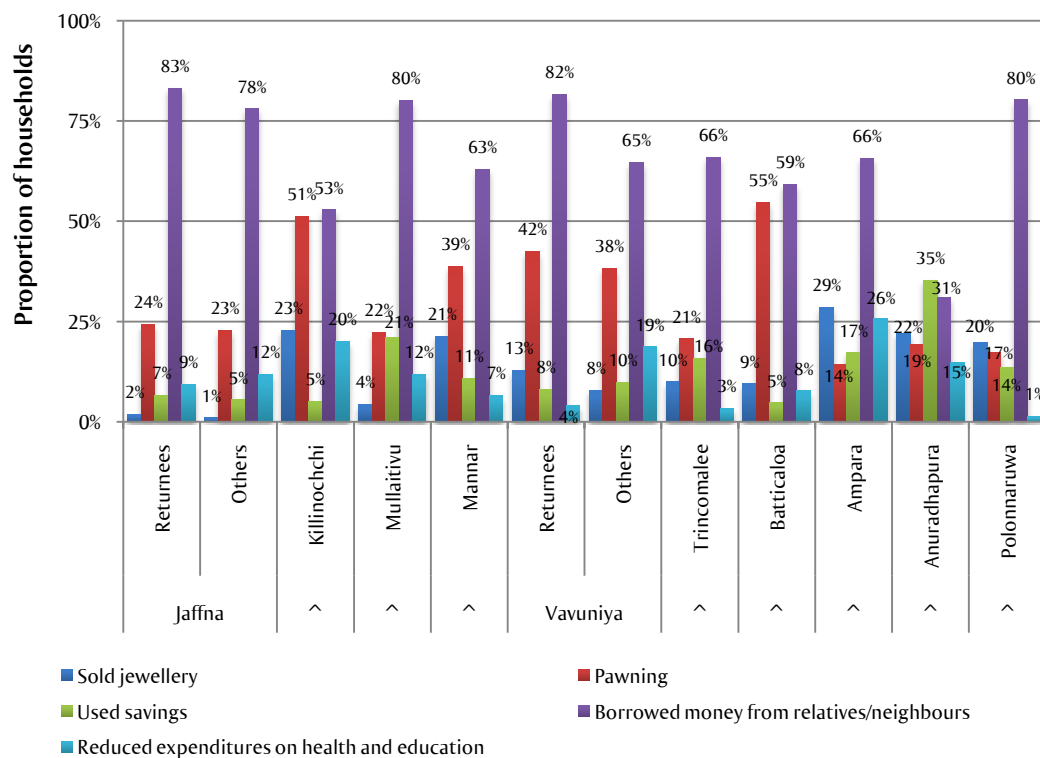
The mean length of applied coping strategies is longest in Killinochchi and Mullaitivu. Yet, the average length is also quite long in Vavuniya, particularly when it comes to relying on less preferred foods, reducing the meal frequency or meal sizes. Similarly to the previous findings, this indicates a worse nutritional situation in these districts compared to other districts. On average, households in Killinochchi and Mullaitivu had limited the meal size approximately 2 days a week while reducing the number of daily meals 1.5 days a week. Another important finding is that on average, only a few households in the Eastern and North Central Provinces (with the exception of Batticaloa) had reduced their meal size or number of meals.

Figure 99 : Average length of applied coping strategies



Other coping strategies included strategies to raise income or reduce expenses. For instance, more than half of all households borrowed from relatives and neighbors during the previous month. The only exception was the district of Anuradhapura where only 31 percent of all households reported to have borrowed money. Instead, in Anuradhapura 35 percent of households – the largest proportion of households among districts – used savings to cope with food shortages. Moreover, in the North Central Province as well as in Killinochchi and Mannar, around 20 percent of households had sold the jewellery they possessed. More drastic coping strategies included a large proportion of households (about 40 to 50 percent) using pawning as a coping strategy in Killinochchi, Mannar, Vavuniya and Batticaloa .

Figure 100 : Other coping strategies to increase income



Overall, coping strategies were used in all surveyed districts; yet, they were most common and most severe in the Northern Province and the districts of Batticaloa. Widely used coping strategies included: relying on less preferred foods, borrowing food from friends or relatives as well as food purchasing on credit. However, a worrisome finding was that in Killinochchi, Mullaitivu, Vavuniya and Batticaloa, a high proportion of households had also reduced the number of meals per day as well as meal sizes.

17 Food security

Food security relates to availability of food and households' access. For this assessment, food security is a composite indicator based on income level, expenditure patterns and food intake. Component indicators were selected so as to allow food security status to be determined without bias across different geographical areas, livelihood groups and residential status. It also keeps with classification systems used in previous food security assessments. The classification system is shown in Figure 101 where red cells indicate severely food insecure households, yellow cells indicate moderately food insecure households and green cells indicate food secure households. For example, households that earn below less than half the poverty line are severely food insecure, unless they spend less than 65 percent of their income on food and also have acceptable food consumption. The proportion of the (weighted) sample appears in each cell.

Figure 101 : Food security classification system

		Access indicators		Food consumption			Total
		Income poverty	Proportion of income spent on food	Poor	Borderline	Acceptable	
Food access	Poor	Income below half the poverty line	>65%	1%	2%	3%	6%
			=<65%	0%	1%	2%	3%
	Average	Income between half the poverty line and the poverty line	>65%	1%	4%	18%	22%
			=<65%	0%	2%	13%	15%
	Good	Income above the poverty line	>65%	0%	1%	14%	15%
			=<65%	0%	2%	36%	39%
Total				2%	12%	86%	100%

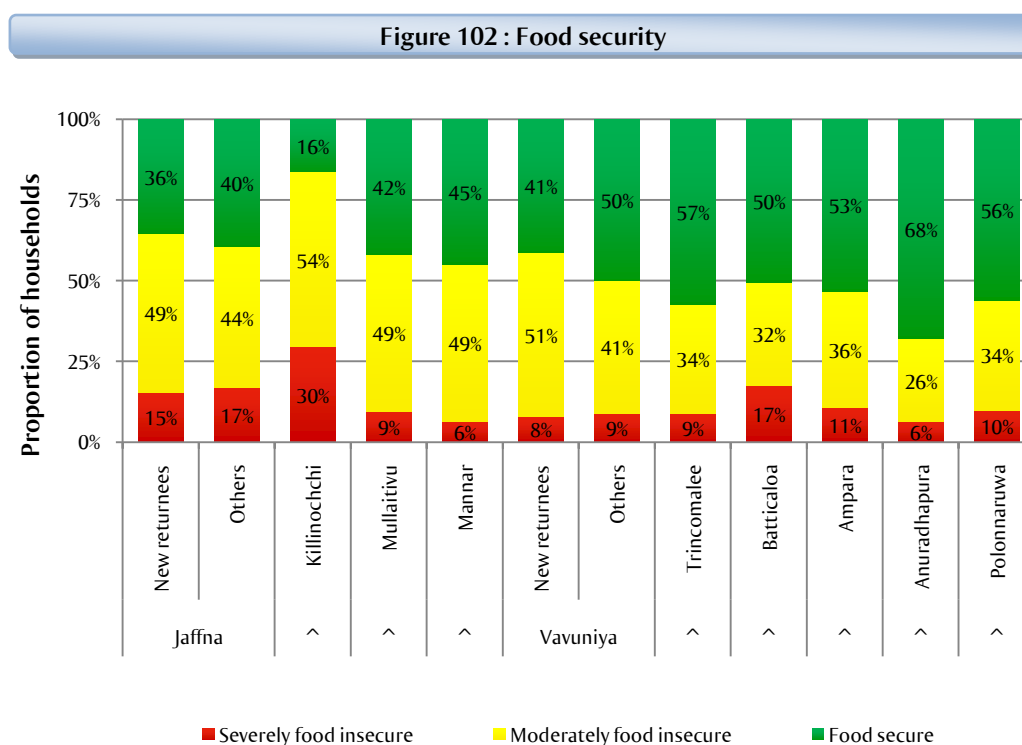
The severely food insecure population – 12 percent of sampled households – have very low income levels. Even when spending the bulk of their income on food, many in this group were unable to satisfy basic food needs. Deep poverty risks erode household and livelihood assets and force the households into negative and dangerous coping behaviours.

The moderately food insecure group – 36 percent of the overall population – has a higher income than the severely food insecure and spend less on food. Many in this group are able to reach an acceptable level of food consumption at the household level. Still, income levels sit around the

national poverty line with small margins in the household economy and very limited ability to cope with income shocks or price increases. Although able to satisfy their basic needs, those falling in this category do not have the resources necessary to develop their livelihoods.

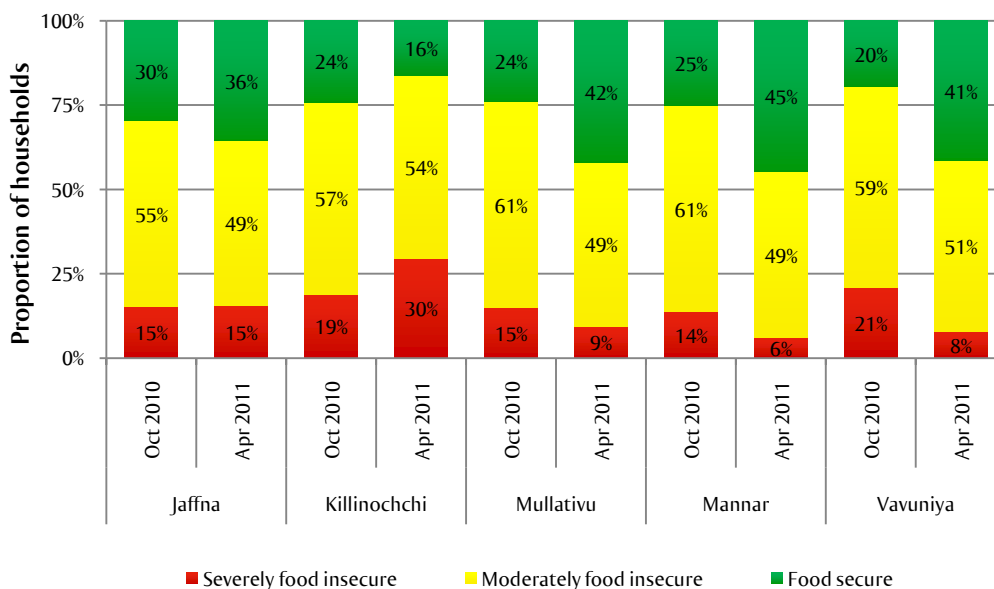
The food secure group – 52 percent of the population – are above the poverty line and spend less on food than the other two food security groups, enabling them to invest in health, education, livelihood development and other household priorities. The vast majority of households in this group have acceptable food consumption.

As shown in Figure 102, Killinochchi is the most food insecure district. The Northern Province is generally more food insecure than the Eastern Province, which in turn is generally more food insecure than the North Central Province. However, food insecurity in Polonnaruwa is found to be at a similar level to Trincomalee.



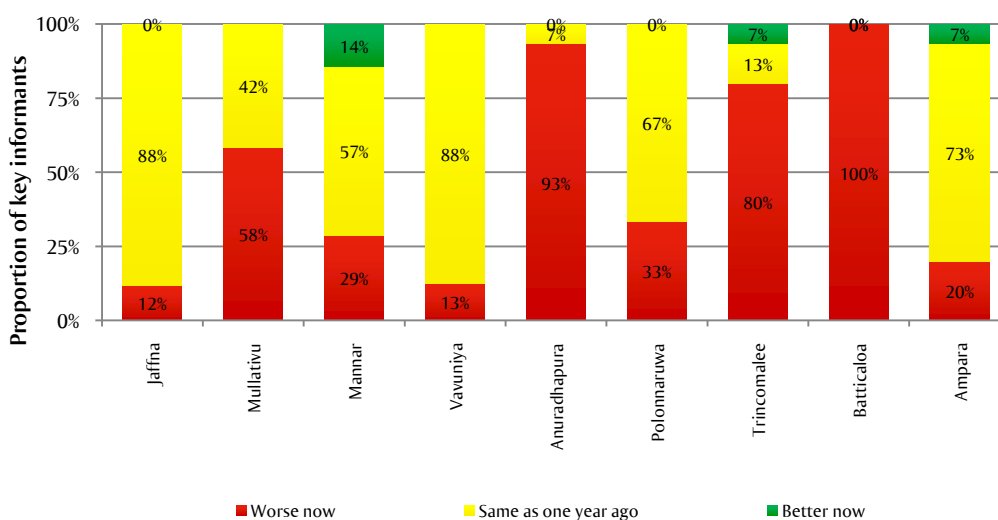
Although food insecurity is wide-spread, the situation of many returnees in the Northern Province has improved since October 2010. Food security has ameliorated considerably in Mullaitivu, Mannar and Vavuniya, deteriorated in Killinochchi and remained at a somewhat fixed level in Jaffna. As October is lean season and April is post-harvest, the improvements outside of Killinochchi follow an expected seasonal pattern. The improvements seen in food security (outside of Killinochchi) are largely a results of a relatively minor increase in income.

Figure 103 : Food security, trend over time (returnee households only)



When analyzing key informant data, similar discouraging results can be observed since a sizable percentage of key respondents in all surveyed districts claimed that the food security situation has worsened. Especially in Anuradhapura, Trincomalee and Batticaloa, at least 80 percent of key respondents asserted that food security had deteriorated. This proportion was also high in Mullaitivu, amounting to more than 58 percent of key respondents. Improvements in food security are less noticeable: just over 10 percent of key respondents in Mannar stated that food security has improved, while it was 7 percent in Trincomalee and Ampara.

Figure 104 : Food security development



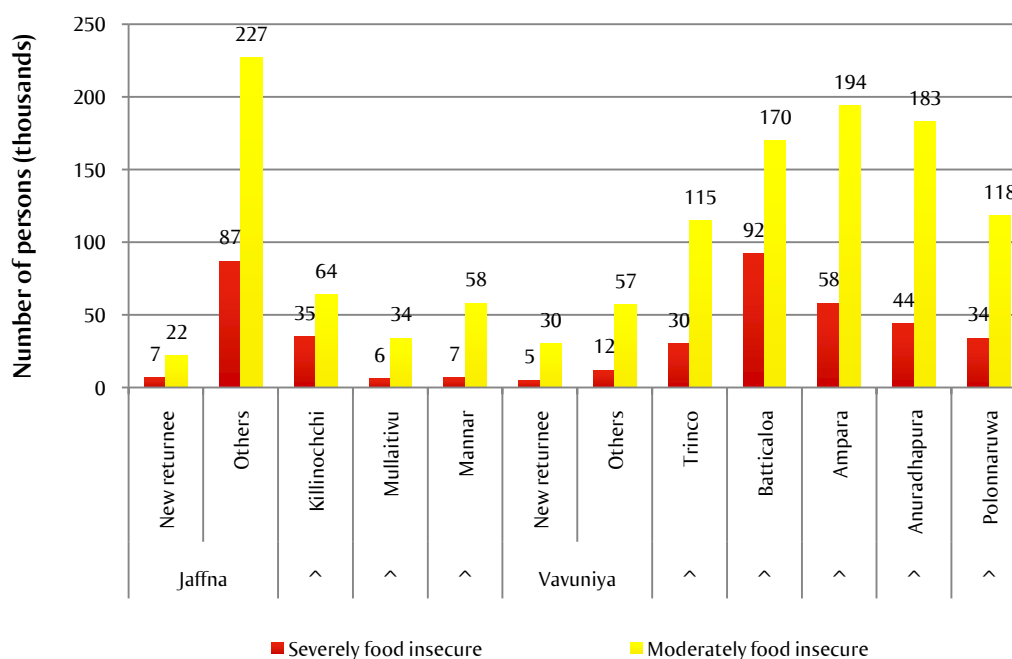
Regarding the absolute number of severely and moderately food insecure people, it can be clearly seen that Jaffna and Batticaloa have the largest number of people in-need of food assistance, both comprising more than 80,000 beneficiaries that are severely food insecure and around or more than 170,000 who are moderately food insecure. Killinochchi and Trincolmalee also demonstrate a high number of people that are severely food insecure, while the Eastern and North Central Provinces have the highest number of moderately food insecure people.

Thus, in total, the most food insecure people are found in the Northern and Eastern Provinces amounting up to more than 600,000 in each province.

Table 4 : Number of food insecure persons, by province

	Population size	Severely food insecure	Moderately food insecure	Total food insecure people
Northern Province	1,071,000	142,000	507,000	649,000
Eastern Province	1,410,000	174,000	479,000	653,000
North Central Province	1,055,000	85,000	316,000	400,000
Total	3,536,000	400,000	1,302,000	1,702,000

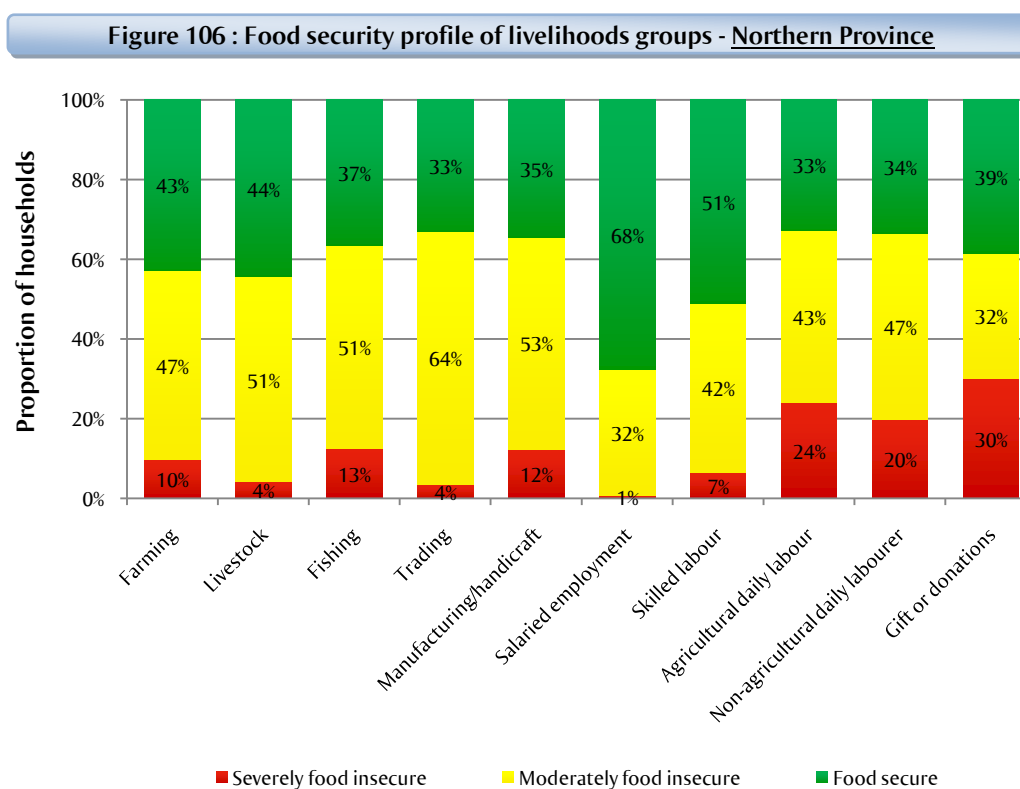
Figure 105 : Number of food insecure persons, by district



17.1 Food security profiling

The food security profiling examines the geographical pattern of food insecurity; but there are also important non-geographical determinants of food insecurity. As seen in Figure 106 through Figure 108 three livelihood groups stand out as generally less food secure than others³⁵:

- 1) households who depend on gifts and donations as their main income source;
- 2) agricultural and non-agricultural daily wage labourers in all three Provinces (apart from agricultural labourers in Anuradhapura and Polonnaruwa); and
- 3) fishing households in the Eastern Province.



³⁵ Some livelihood group with too few observations to report on were removed from the charts. This is particularly apparent in the chart for Anuradhapura and Polonnaruwa.

Figure 107 : Food security profile of livelihoods groups - Eastern Province

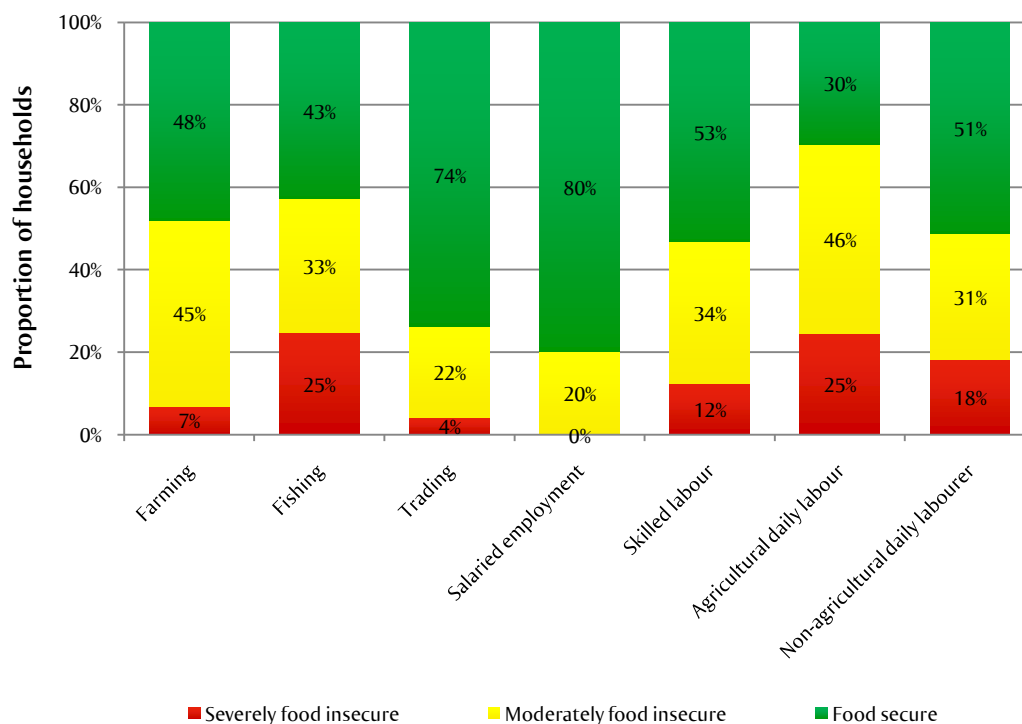
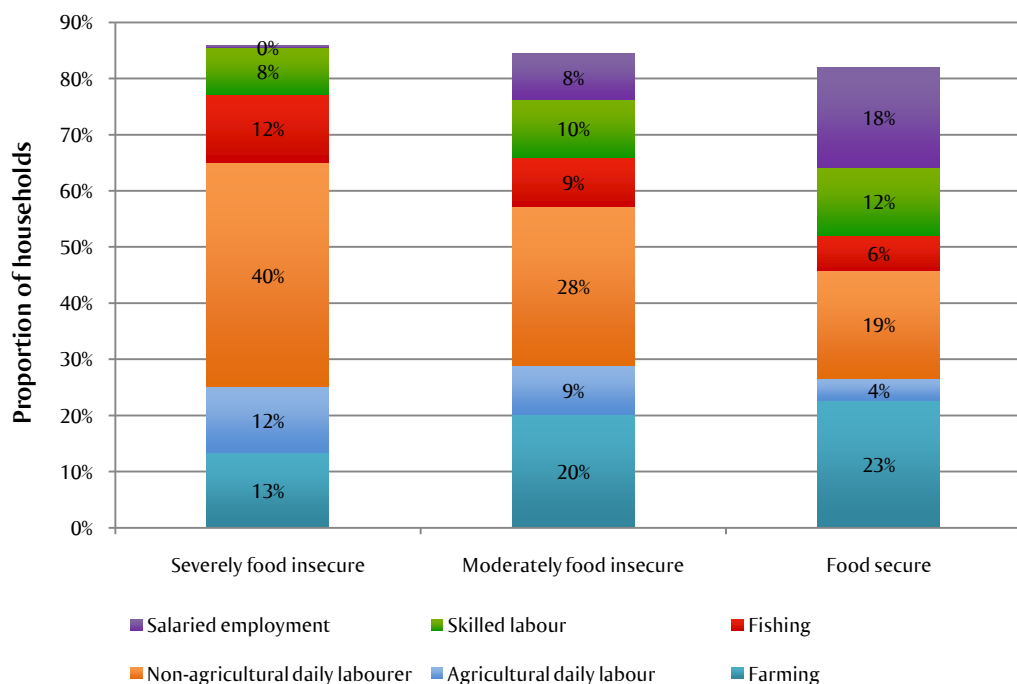


Figure 108 : Food security profile of livelihoods groups - Anuradhapura and Polonnaruwa



Livelihood profiling of food security groups, illustrated in Figure 109, reveals that fishermen and daily wage labourers (agricultural and non-agricultural) are overrepresented in the two food insecure groups. This would suggest that these livelihood groups could be given priority for development activities, as discussed in Chapters 19 and 20.

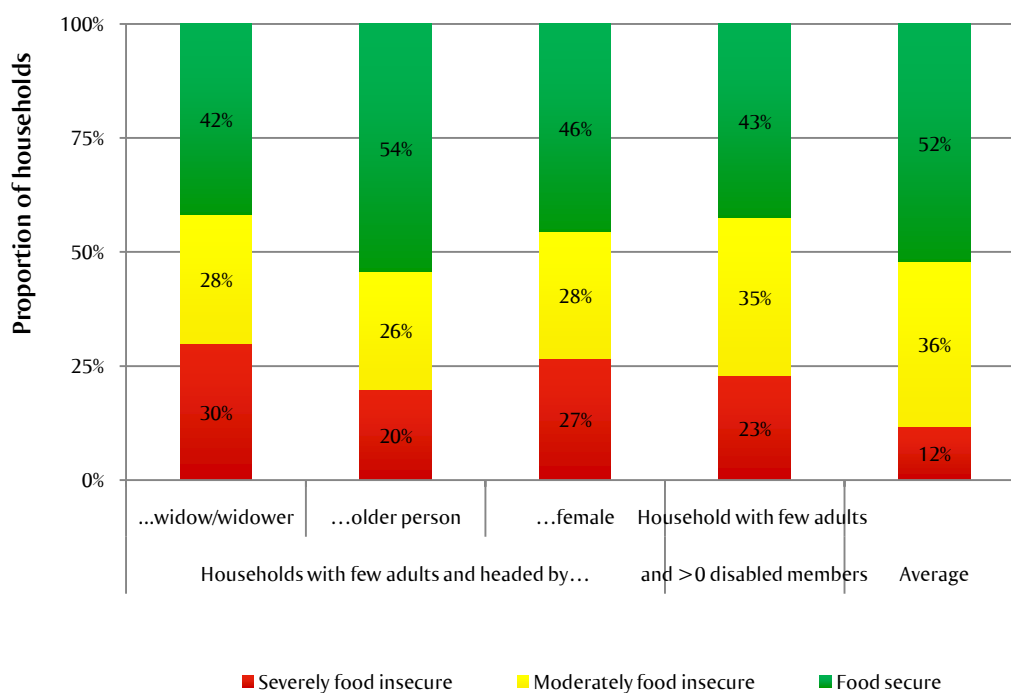
Figure 109 : Livelihood profiles of food security groups – all provinces



Population groups typically assumed to be relatively food insecure includes households headed by a widow/widower, an older person or a female, and households with disabled persons. After removing households with a sufficient number of adults in productive age from these groups³⁶, all but one exhibit a worse food security profile compared to the average household (see Figure 110): households with few adults and either with one or more disabled person or headed by a widow/widower or female are relatively food insecure. These three groups could be given priority to unconditional assistance as discussed in more detail in Chapter. Households headed by an older person (and with few adults in productive age) are more likely to be severely food insecure, but not more likely to be food insecure compared to the general population.

³⁶ The four group under consideration is defined as: 1) households headed by a widow or widower and with fewer than 2 adults in productive age (19-63); 2) households headed by an older person (64 years old or older) and with fewer than 2 adults in productive age; 3) households headed by a female and with fewer than 2 adults in productive age; and 4) households with one or more disabled person and with fewer than 3 adults in productive age.

Figure 110 : Food security profile of vulnerable groups



Households with less educated heads are more food insecure compared to the households with well educated heads. As illustrated in Figure 111, 71 percent of households which are headed by individuals with no formal schooling are food insecure. Eighty-eight percent of the households with highly educated heads belong to the food secure category. As is immediately apparent from Figure 111, the more educated the head of household is, the more likely the household is to be food secure.

Figure 111 : Food security profile of household head's education level

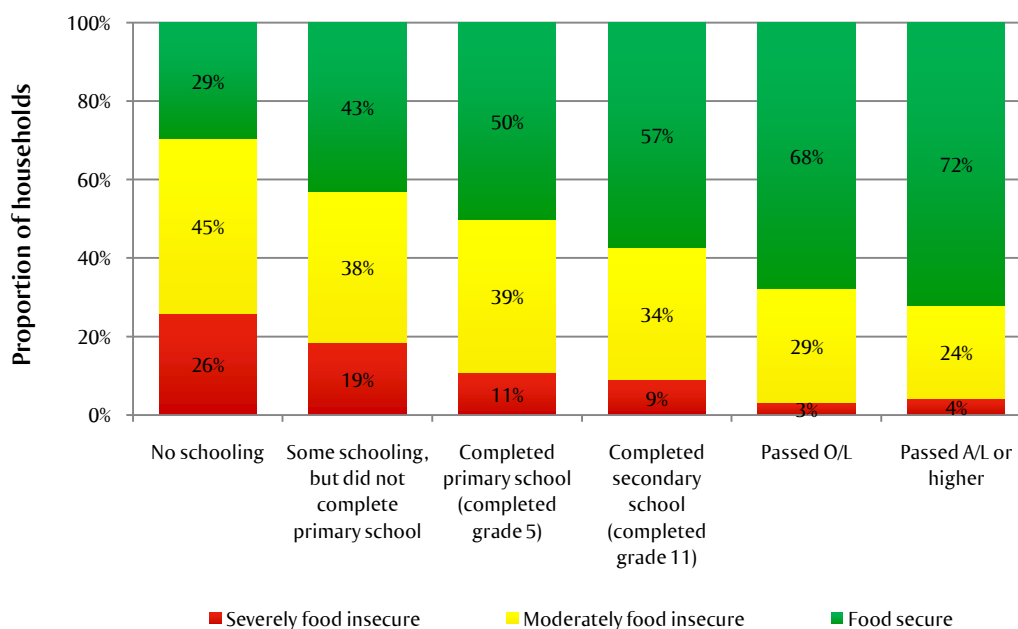
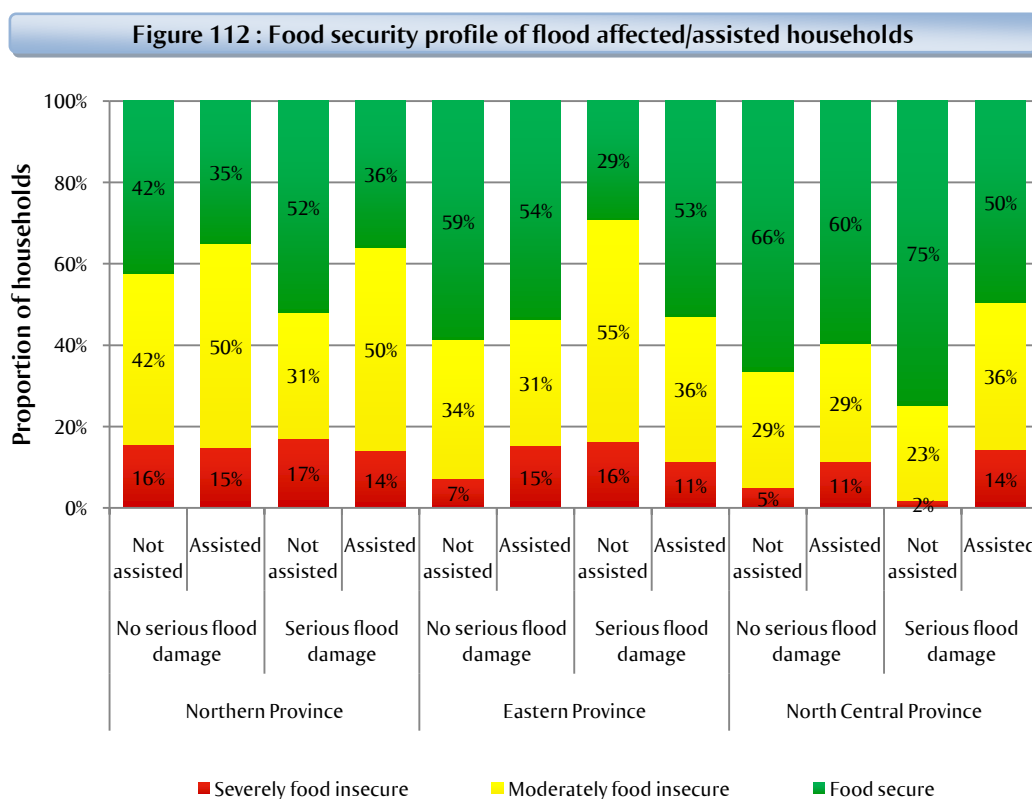
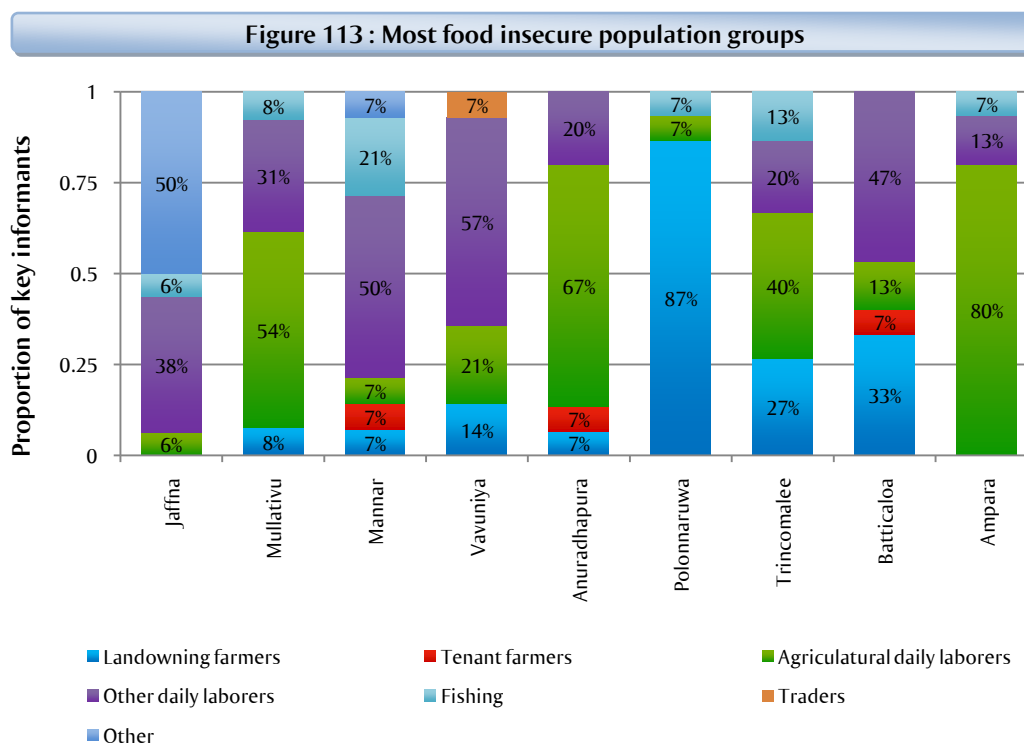


Figure 112 compares the food security situation between households who experienced severe flood damage and households who did not. The degree of flood effect was based on households' level of housing and livelihood destruction. At an aggregated level, there is little difference in food security conditions between flood affected and non-affected households. However, the food security situation of flood affected households was improved by the large-scale distribution of food assistance, targeting the most affected communities. As seen in Figure 112 the part of the flood affected population in the Eastern Province that received food assistance performs significantly better than the flood affected population that did not receive food assistance. The impact of the flood and the assistance is less clear in the two less flood-affected provinces.



With respect to the key informant data on how livelihood activities impact food security, it was noticeable that in all districts with the exception of Polonnaruwa people who engaged in agricultural and non-agricultural daily labor seemed to be the most vulnerable group. At least 44 percent of the key respondents agreed to that statement in each district. The only exception was Polonnaruwa where 87 percent stated that landowning farmers were the most vulnerable group.



17.2 Causes of food insecurity

Causes of food insecurity differ substantially across the ten surveyed districts. In the Northern Province the twenty six-year civil war was the single most important cause of food insecurity. In Killinochchi, Mullaitivu, Mannar, northern Vavuniya and eastern Jaffna many households were displaced during the final fighting of 2008 and 2009 resulting in loss of property, assets and livelihoods due to frequent multiple displacements. Therefore, after the resettlement process commenced, tens of thousands of people returned to their homelands empty-handed and are still struggling to develop their livelihoods with limited resources. Poor land access for cultivation due to mined fields and high security zones as well as lack of irrigation facilities and soil salinity have made cultivation problematic for many. Other parts of Jaffna and Vavuniya, as well as border areas in the Eastern and North Central provinces, although not in every case facing displacement, are also conflict affected.

Monsoon floods were a sudden shock especially for people in the Eastern and North Central Provinces. North-East monsoon rains began in mid-November 2010 resulting in severe precipitations in Northern, Eastern, North Central, Central and North Western Provinces. The rainfall intensified in December and January causing heavy flooding, limited accessibility, severely damaged crops and major displacement in the districts of Batticaloa, Ampara, Trincomalee, Anuradhapura and Polonnaruwa. In these five districts, more than one million people were affected by floods and nearly 400,000 people were temporarily displaced. In addition to displacement, the floods also caused loss of crops (both paddy and highland) and property, general damage to livelihoods, inaccessibility of large areas, limited ability of physical movement and a limited number of deaths.

In addition to food insecurity brought about by conflict and floods, there is also considerable chronic food insecurity in areas which were comparatively less war and flood affected.

17.3 Food security scenarios

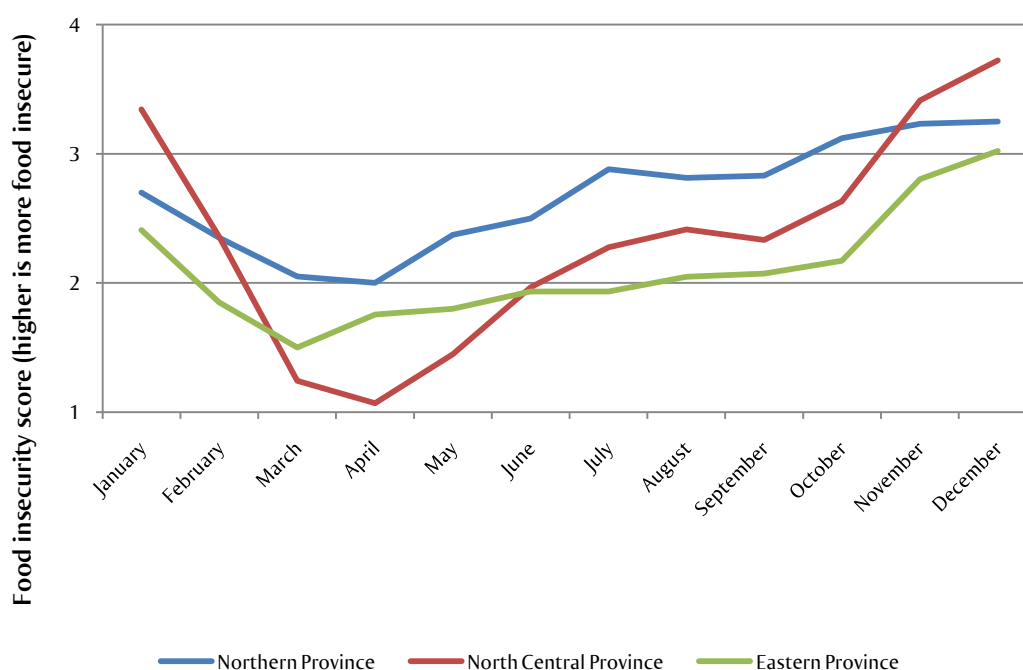
The seasonal household food insecurity in Sri Lanka, particularly in the Northern Province, makes forecasting of the food security situation difficult. However, because data in this survey was collected in April – a couple of months after harvesting of the main cropping season – it is likely that the overall situation of the population will deteriorate in the coming months as the lean season approaches. For farming households that cultivate the *yala* season, food security will improve around harvest time in August-September. In areas where the *yala* is not cultivated – primarily in areas where the irrigation infrastructure is insufficient – many households will not get a major income opportunity until the major *maha* cropping season starts in October and the demand for labor increases. For many farming households in areas where the *yala* is not cultivated, the next big food and income generation would come around January 2012 with the harvest of the next *maha* season.

An important element to take into consideration for the planning of food security interventions in the near future is the expected reduction of WFP food assistance to the district of Mullaitivu. At the time of data collection a large proportion of the Mullaitivu population was receiving significant amounts of food assistance as part of WFP's support to recently returned households. Because the last peak of resettlement to Mullaitivu was in October 2010, the vast majority of households will graduate from WFP food assistance in May-July of 2011. The food security profile in Mullaitivu based on the data collected in this survey is influenced in a positive way by the large-scale food assistance project in the area and this profile will change as food assistance is reduced. As the districts of Killinochchi and Mullaitivu are very similar (in terms of both degree of conflict impact and time of return), it can be reasonably expected that food security levels in Mullaitivu in the second half of 2011 will approximate those in Killinochchi during the time of data collection. The planning number for Mullaitivu in Chapter 19 will therefore be based on the Killinochchi food security prevalence.

17.4 Seasonality of Food Security

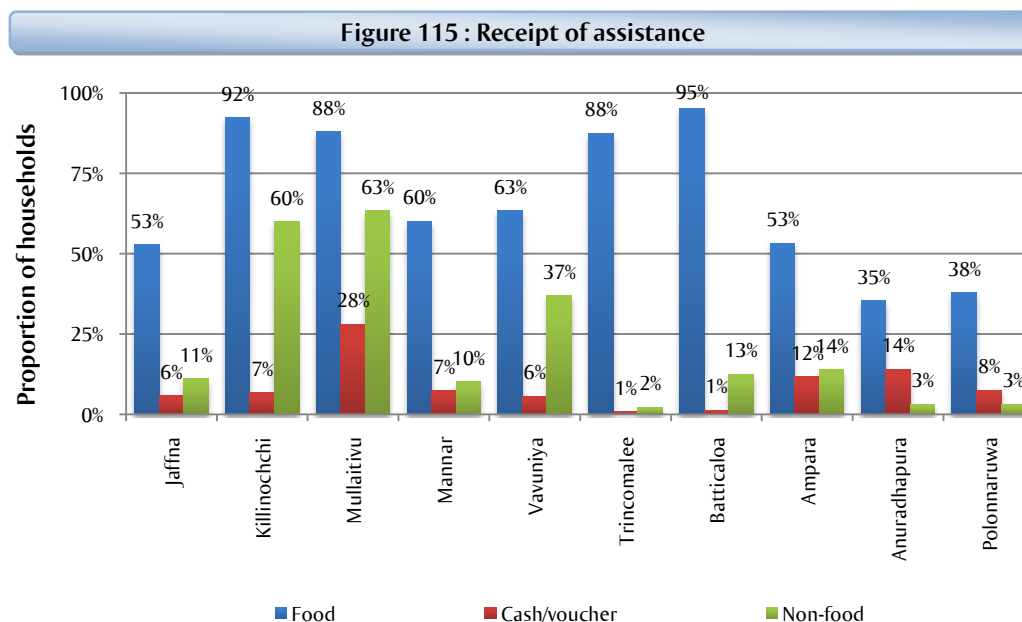
Seasons strongly affect food insecurity. To estimate the seasonal impact on food insecurity, key respondents were asked to rate every month by food security. The scale ranged from 1 to 4: 1 for “food secure”, 2 for “less food insecure”, 3 for “moderately food insecure” and 4 for “severely food insecure”. Figure 114 shows the average of the given responses in the respective provinces. From March to May the food security in all provinces improves, in April, most key respondents claimed the North Central Province to be completely food secure. October to February time period is the lean period for all the provinces and reach to the mostly food insecure status in around December.

Figure 114 : Seasonal impact on food insecurity



18 Relief and recovery assistance

Food assistance is the most commonly received form of assistance in all sampled districts. Apart from some non-food assistance in Killinochchi, Mullaitivu and Vavuniya, and cash assistance in Mullaitivu, food assistance is by far the modality of widest coverage.

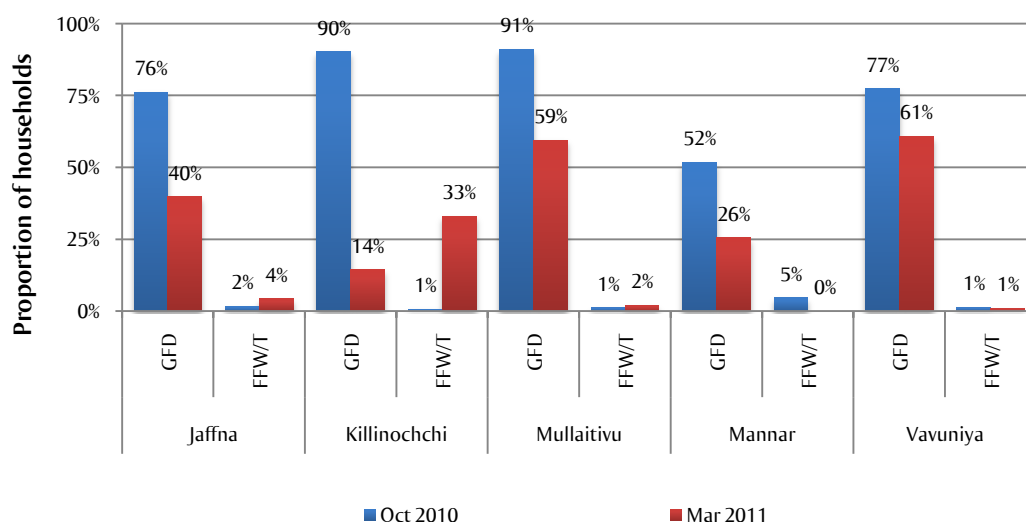


Provision of WFP food assistance is declining among all returnee populations as illustrated in Figure 116. As a consequence of the WFP policy of providing returning households with unconditional food assistance (known as general food distribution, or GFD in Figure 116) to cover them for six to nine months (depending on their food security situation) from the time of resettlement (or relocation), large populations have graduated³⁷ and will continue to graduate from assistance in the months ahead. Since October 2010, many households who at the time of this assessment were receiving food assistance under this policy are no longer receiving assistance as they completed the permissible time. As shown in Figure 116, the proportion of returnee households in Killinochchi who received GFD has diminished from 90 to 14 percent. Large decreases in the coverage of assistance are also evident for returnee populations in all other Northern districts.

Mullaitivu, with a comparatively better food security situation compared to Killinochchi, despite the many similarities of their populations, is believed to be partially explained by the broader coverage of food and cash assistance. Overall, arrival of returns in Mullaitivu peaked a few months after it peaked in Killinochchi, and as a result many households in Mullaitivu who are on food assistance will start to graduate in the coming months (like the majority in Killinochchi). Given the similarities between the two districts, it is likely that food security conditions in Mullaitivu will deteriorate in the coming months, as food assistance will be scaled down.

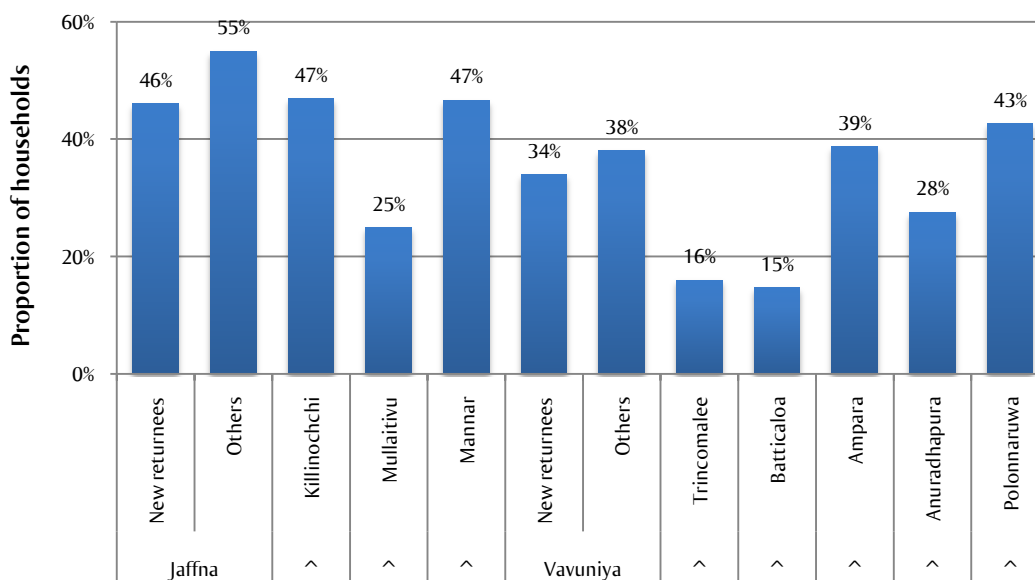
³⁷ Graduation denotes the completion of the entitlement to the free food assistance.

Figure 116 : Receipt of WFP food assistance, trend over time (returnee households only)³⁸



As a result of extensive food insecurity and diminishing food assistance, the proportion of the population that is food insecure is high, as shown in Figure 117, but they do not receive food assistance. The Northern Province, Jaffna, Killinochchi, Mannar and Vavuniya, has a large proportion of food insecure non-recipients. The relatively smaller proportion in Mullaitivu is explained by the broader coverage of food assistance in this district.

Figure 117 : Proportion of households that are food insecure and do not receive food



³⁸ GFD stands for General Food Distribution. FFW/T stands for Food For Work/Training.

19 Level of need

Food security interventions are needed for the food insecure proportion of the population. The type and nature of interventions will vary across geographical area and population groups and therefore assistance should be given by careful consideration of local conditions.

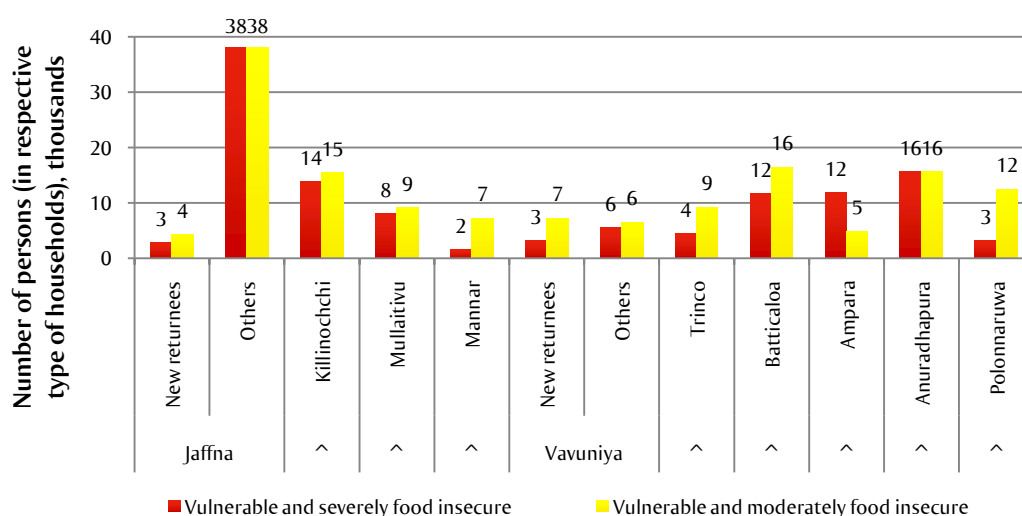
Broadly, two types of interventions can be defined: one that requires participation and effort from the beneficiary (such a work or training) and one that does not. This chapter estimates the number of persons in both these groups.

Non-participatory food security interventions³⁹ are appropriate for vulnerable population groups⁴⁰ that are food insecure. This population – chronically food insecure and with typically low capacity for productivity – are in need of a social safety net to guard them from detrimental deterioration in food security. The food insecure segment of the vulnerable population is approximately 266,000 persons in the sampled areas (see Figure 118 and Table 5 below).

Because of considerable government social safety nets in the Eastern and North Central province, the vulnerable and food insecure population of the Northern Province – approximately 160,000 persons – should be of most immediate concern for external assistance. The severely food insecure and vulnerable population in the Northern Province – approximately 73,000 persons – should be considered of highest priority.

It could be possible for some households in this group, particularly female headed household and households with disabled members, given the unique conditions in each household, to participate in low-intensive projects such as some food for training.

Figure 118 : Number of vulnerable and food insecure persons assistance



³⁹ Non-participatory food security interventions are interventions that do not require anything in return from the beneficiary, such as WFP's General Food Distribution (GFD) or Vulnerable Group Feeding (VGF).

⁴⁰ Food insecurity is closely linked to the number of able bodied adults in the household. See Chapter 17.1 for a discussion on food insecurity.

Table 5 : Number of vulnerable and food insecure persons

	Vulnerable and <u>severely</u> food insecure (persons)	Vulnerable and <u>moderately</u> food insecure (persons)	Vulnerable and <u>food insecure</u> (A+B) (persons)
Northern Province	73,000	88,000	160,000
Eastern Province	28,000	30,000	58,000
Anuradhapura and Polonnaruwa	19,000	28,000	47,000
Total	120,000	146,000	266,000

Appropriately designed **participatory food security interventions** could be extended to all or any part of the food insecure population, outside the vulnerable group which do not have the capacity for such participation. The size of this population is approximately 1,431,000 persons in the sampled areas. The least food secure districts of Killinochchi, Mullaitivu, Jaffna, Mannar and Vavuniya should be given priority for recovery and development interventions. The multitude of actors involved in recovery and development assistance, including national and governmental bodies, makes coordination essential. The significant government involvement also means that external assistance is not necessary for the entire food insecure non-vulnerable population. As with non-participatory interventions, highest priority should be given to the severely food insecure population of the Northern Province, a population of 99,000 persons.

Figure 119 : Number of food insecure but not vulnerable persons

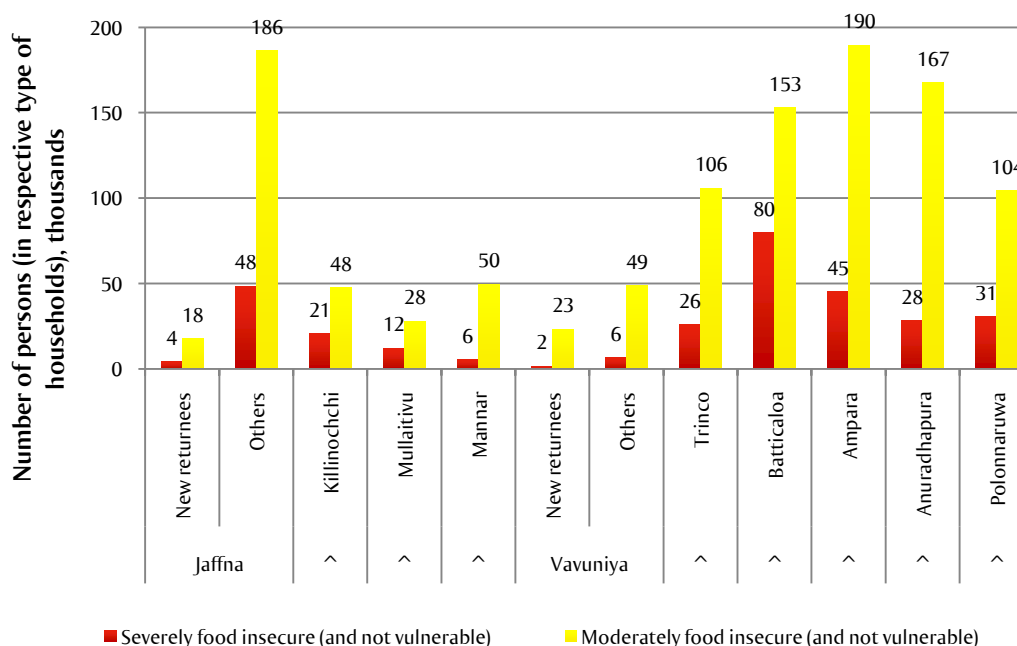


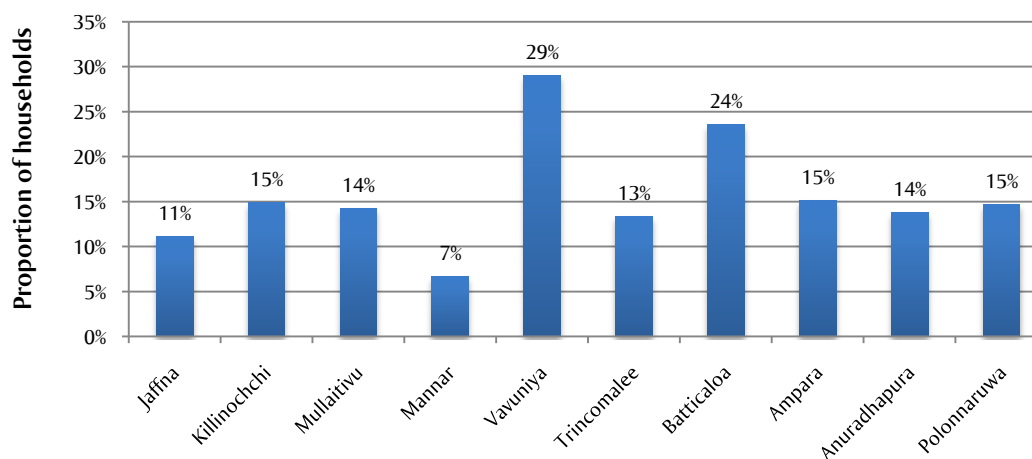
Table 6 : Number of food insecure but not vulnerable persons

	A: Severely food insecure and not vulnerable (persons)	B: Moderately food insecure and not vulnerable (persons)	A+B: Food insecure and not vulnerable (persons)
Northern Province	99,000	401,000	501,000
Eastern Province	151,000	448,000	600,000
Anuradhapura and Polonnaruwa	59,000	272,000	331,000
Total	310,000	1,122,000	1,431,000

19.1 Flood impact

A large population is still recovering from the record floods in January and February (see chapter 15 for a detailed description of flood impact and damage). Recovery assistance is required to quickly rebuild productive capacity and ensure that the food security situation does not deteriorate. The part of the population that sustained severe and lasting damage to housing or livelihoods and that is food insecure should be prioritized for assistance, a population accounting for between 7-29 percent of district population.

Figure 120 : Proportion of households that are seriously flood affected and food insecure



The size of this population that sustained severe and lasting damage to housing or livelihoods and that is food insecure is approximately 557,000 persons (see Table 7). Because many severely flood affected and food insecure households in the Northern Province already receive food assistance under the WFP PRRO, it is recommended that priority of flood assistance is given to the Eastern and North Central Provinces. Batticaloa is the worst affected district and should be the focus of assistance. Although quantitative data suggests that the proportion of need in Trincomalee, Ampara, Anuradhapura and Polonnaruwa is similar (ranging from 13 to 15 percent of households), qualitative data suggests that Trincomalee and Ampara could be more in need of assistance.

Figure 121: Number of persons that are seriously flood affected and food insecure

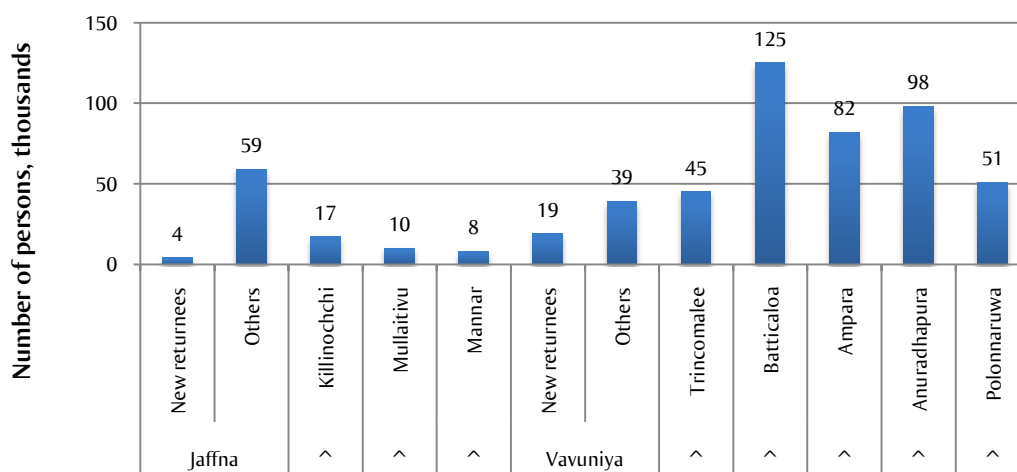


Table 7 : Number of persons that are seriously flood affected and food insecure

	Seriously flood affected and food insecure persons
Northern Province	156,000
Eastern Province	252,000
Anuradhapura and Polonnaruwa	149,000
Total	557,000

It should be noted that the population of 557,000 persons identified in Table 7, because it is food insecure, is a sub-population of the population of 1,697,000⁴¹ Table 5 and Table 6.

⁴¹ 266,000 persons in Table 5 plus 1,431,000 persons Table 6 is 1,697,000 persons.

20 Reviewing food assistance

For the WFP, food assistance to conflict affected households in the Northern Province and to flood-affected households in the Eastern and North Central Provinces form the bulk of program activities. Food assistance is also provided to school children and malnourished persons in food insecure areas.

Free food distribution in the Northern Province is provided to households displaced by war and commences when households resettle or relocate and is given over a period of 6-9 months depending on local food security considerations. In suitable locations food for work schemes were initiated after the conclusion of the free returnee food package. The WFP assistance project was designed to guarantee acceptable food intake for new returnees while livelihoods were developed to a degree where sufficient food and income could be generated independently by households.

Assistance is also provided to households still living in displacement camps, a population the size of 22,000 persons in January 2011. As returns continue, this population has shrunk and was in July 2011 12,000 persons. WFP assistance to camp populations and returning families in the Northern Province is provided under Protracted Relief and Recovery Operation (PRRO) 200143.

Assistance to flood affected households in the Eastern and North Central Provinces started in February 2011 with free food distributions, with a limited duration of 7-14 days depending on local conditions. In order to assist in the rehabilitation of the vast flood damage to private and common assets, the program was converted to a food for work project, focused on flood affected communities. WFP assistance to flood affected persons is provided under Emergency Operations (EMOP) 200239.

20.1 A changing program

In the Northern Province, new displacement ended in May 2009 with the conclusion of the war. Soon after many households, particularly in Jaffna, started to return either to their areas of origin or to new locations. Returns to other Northern districts started later in 2009 and continued into 2010 and 2011. Mullaitivu district was the last to be opened up for returns and also were the rate of returns peaked last. By the end of 2010 the resettlement program was largely completed and the pace of return had slowed to a trickle.

The pace and duration of returns in the Northern Province had great impact on WFP's activities in the region. Because of the policy to provide 6-9 months food rations to returning households, to be commenced at the time of return, the scale of food assistance provided mirrored the scale of returns. Naturally, as time elapsed, an increasing number of households started to graduate from food assistance in 2010 and 2011, resulting in a substantial reduction in the number of WFP beneficiaries and in the volume of assistance flowing into the region.

This assessment finds that although the WFP assistance project for the North was designed to safeguard against post-resettlement food security deteriorations – during the time of livelihoods rehabilitation – the reduction in food assistance comes at a time when livelihoods are still underdeveloped. The substantial non-availability of basic infrastructure and services in many parts of

the Northern Province and serious damage to private and public assets provide a challenging environment for households to re-establish their livelihoods.

Moving forward, the reduction in food assistance to the Northern Province in 2010 and 2011, resulting from the policy of providing a 6-9 month returnee food ration, does not appear to reflect the food security needs in the population and is currently under re-evaluation by the Programme. The policy of blanket and time-bound assistance to returnee households may need to make way for a more comprehensive and targeted assistance strategy. The strategic shift for the North would entail important modifications in areas of **modality**, **targeting** and **delivery instruments**, based on a changing environment.

20.2 Modalities of assistance

The chief modality of assistance in the Northern Province in the post-conflict time has been the returnee food package – a form of free food distribution. However, as households are becoming increasingly settled, the need to move from relief to recovery is becoming apparent. Poverty is deep and wide-spread, the only sustainable solution to which is to enhance the productivity and profitability of livelihoods. Food assistance projects should focus on creating assets and developing capacities at the household level and on helping to address key environmental bottlenecks such as irrigation infrastructure or road networks.

Work projects⁴² aimed at removing factors constraining livelihoods development should be considered high priority interventions. Activities could include rehabilitations of private assets such as clearing of farm land, establishing and extending home gardens, creating water sources etc. Restocking of livestock lost during the war is also required as livestock rearers often lack the financial capacity to recover independently. Needs will vary widely across livelihood zones and population groups and local rapid assessments will be required to find practical and sustainable designs for interventions.

Interventions to develop human capital and capacity are also called for. Displacement, in some cases for long periods of time, and pre-conflict underdevelopment of the education sector have resulted in an absence of marketable skills. Training projects should be directed to skill-building with a clear and realistic potential for income generation but could range from literacy education to vocational training to entrepreneurial support. Type of training will differ from location to location and should be preceded by investigations into the local demand for skills and potential of the population.

Appropriately designed work and training projects could be extended to all or any part of the food insecure population able to participate in works and trainings, a population totalling 1.4 million persons in the sampled areas⁴³. The impracticality of assisting such a large population underlines the importance of targeting, which is discussed in the next sub-section. The non-vulnerable severely food insecure population of the Northern Province – a population of approximately 99,000 persons – will be the top priority for WFP assistance.

⁴² Work projects include food for work, cash for work or voucher for work. See Chapter 20.5 for a discussion about each instruments advantages and disadvantages.

⁴³ See Chapter 19 for a discussion about the level of need.

Unconditional safety nets without a component of work or training requirement will be necessary for vulnerable groups, including food insecure households without able-bodied adult men. The size of this population is approximately 266,000 persons. The vulnerable and severely food insecure population of the Northern Province, where social safety nets have the least coverage, will be the top priority for WFP assistance. This population is approximately 73,000 persons⁴⁴. Any unconditional WFP assistance should be based on an explicit exit strategy and be preconditioned on a common understanding with the Government of Sri Lanka that government run social safety nets should be rolled out in areas not yet covered and that the WFP caseload be migrated to such programs within a reasonable amount of time.

Although not included in the sample of this assessment, the population still in camps in Jaffna, Vavuniya and Trincomalee should continue to receive unconditional food assistance as long as their current precarious food security situation remains.

The possibility of households displaced as a result of conflict returning to the Northern Province from India, Puttalam and other areas in 2011 and 2012 should be taken into account for project planning and implementation. The pace of return is difficult to forecast but is slow at the time of writing. The need for external assistance to this population can be reasonably expected to be different from the population returning from camps. Depending on the capabilities and resources of the returnees, assistance could be warranted, but such assistance should be based on food security need.

Given the underlying general food insecurity, an in-kind food or cash/voucher element could be an important component of any relief, recovery or development project.

20.3 Geographical targeting

Food insecurity in the Northern Province is more severe than in other surveyed areas. It is also where government run social safety nets have the least coverage: the Samurthi program is partly operational in Jaffna and Vavuniya but non-existent in Killinochchi, Mullaitivu and Mannar.

This assessment finds that the Eastern Province is more food secure than the Northern Province, even after it was devastated by the most severe flooding in recent history. It is believed that the *yala* season of 2011 will be normal in most areas and that livelihoods will recover relatively quickly. In areas where *yala* is not cultivated (due to damaged or unavailable irrigation infrastructure), agricultural livelihoods may not be fully recovered until early 2012.

The North Central Province, particularly Anuradhapura was affected to a lesser extent by both conflict and flooding and with a more resourceful government capacity, is more food secure and considered less in need of external assistance. The needs in this area are protracted and mainly of a development nature.

Based on clear geographical differences in causes and degree of food insecurity and in the extent of safety net coverage, it would be justifiable to focus relief, recovery and development assistance on the Northern Province, particularly Killinochchi and Mullaitivu. However, many flood-affected households in other parts of the country, especially Batticaloa, are in need of temporary assistance

⁴⁴ See Chapter 19 for a discussion about the level of need.

while rebuilding their livelihoods. The North Central Province, where food insecurity is more chronic than a result of livelihood shocks and where government services are more capable, would have a lower priority for external assistance.

20.4 Household targeting

The sheer size of the food insecure population compared to the estimated resources of external assistance agencies renders geographical targeting insufficient. Conversely, the existence of a relatively large food secure populations also in generally food insecure areas, makes blanket food assistance to geographically defined areas inappropriate. It is therefore necessary that geographical targeting be combined with household level targeting. Household targeting would need to be based on different sets of principles depending on the modality of assistance: unconditional assistance to vulnerable groups or projects with a work or training requirement.

Work or training projects could to a large extent be implemented on the basis of self-targeting: Participants would be offered a transfer (whether as cash, voucher or food) at a level below the market clearing wage and thereby attracting mainly individuals unable to find more gainful employment or livelihood activities. Because of the difficulty of managing projects thinly scattered over very large regions, participation may need to be clustered and focused on geographically less food secure areas.

Unconditional assistance to **vulnerable groups** should whenever possible be based on easily recognized, objectively identifiable criteria of selection. As seen in the food security profiling section, three different vulnerable groups tend to be relatively food insecure: female-headed households, households with one or more physically disabled persons and households headed by a widow or widower⁴⁵. Although relatively food insecure, all the vulnerable groups have a sizable food secure proportion of between 42-46 percent of households (see Figure 110). Therefore, blanket assistance to these groups would generate an unacceptably large inclusion error⁴⁶. The actual need of assistance is primarily for the food insecure segment of the vulnerable population. Unfortunately there is no easily observable, physical household characteristic that predicts food insecurity without a large inclusion error. As a result, inclusion of households into unconditional projects will in part have to be based on well informed but discretionary judgment of WFP field staff and implementing partners. Community-based organizations (such as Rural Development Societies) could also be useful partners to this end. Appropriate training may be required to come to a mutual understanding of suitable selection criteria. The monitoring capacity of WFP offices may also require improvement.

20.5 Delivery instruments

Food, cash and vouchers remain WFP's most commonly used instruments for resource transfer. The determination of what instrument is most suitable for any particular region and population group takes primarily two factors into account: food availability and transfer efficiency.

⁴⁵ Households with a sufficient number of adults in productive age have been removed from all groups. See Chapter 17.1 for a detailed definition of vulnerable groups.

⁴⁶ Inclusion error represents the degree to which non-needy households are included in assistance projects. Exclusion error represents the degree to which needy households are excluded in assistance projects.

As seen in the chapter on food sources, most households purchase most of their food from the market, with the exception of some areas of Killinochchi and Mullaitivu. It is therefore arguably proven that accessibility to markets is widespread in most areas. Because there are no reports of food shortage in markets food availability can not be said to be a major concern in most areas, but rather households' access to it. From a food availability perspective, in-kind food assistance is therefore not a necessity in most areas. Theoretically, food security needs could in many places be met through private and local markets.

Comparing the cost associated with distribution of in-kind food assistance with cash or voucher based food intervention gives an indication of the relative efficiency of the two delivery mechanisms. Table 8 enumerates the relevant costs. It is found that the financing of beneficiary food purchase through cash or vouchers is considerably more expensive compared to in-kind food distribution. Assuming same management costs to WFP, the PRRO would be 62 percent more expensive to distribute as a market-based intervention compared to an in-kind food intervention.

Table 8 : Comparison of the cost of market-based and in-kind food assistance

Commodity	PRRO tonnage (mt)	MPCS price (USD/mt)	Distribution cost to WFP (USD/mt)	Price differences (percent)
Raw white rice	22,408	564	459	23%
Wheat flour	15,437	754	486	55%
Pulses	5,475	1,364	635	115%
Vegetable oil	2,285	2,000	1,286	56%
Sugar	1,523	955	869	10%
PRRO total				48%

Although more costly, the potential benefits of a cash or voucher program – including incentivizing local food production, encouraging market actors, proliferating market access and enabling households to purchase more nutritious foods – are important.

Although somewhat outside the scope of the survey at hand, it would appear that cash would be inferior to voucher as a resource transfer mechanism. The difficulty of managing and implementing cash projects, the potential security concerns involved the possible inflationary pressures on local markets and the considerable risk of decreasing purchasing power of cash amounts would suggest that a voucher program could be more appropriate.

Vouchers could therefore be piloted in the 2011 PRRO and that based on results, a possibly sizable voucher component could be considered for the planning of 2012.

20.6 Policy and advocacy

It is necessary to expand the coverage of the Samurthi safety net to food insecure areas of the Northern Province, especially Killinochchi, Mullaitivu and Mannar.

Difficulty of accessing sufficient areas of land for cultivation is widely reported, particularly in Jaffna. In some areas land allotment were made 40 or 50 years ago which was adequate for food production at that time. The growing population has put pressure on the limited resources. The large areas of government land and the possibility of increasing its productivity may warrant further study of land use. Related is the issue of land and sea under exclusive military control and use. The size of high security zones have shrunk recently and access for fishing, cultivation and return has improved. Nevertheless, as restrictions in movement and use remain a constraint for livelihoods in some areas, advocacy for their reduction should be considered. Attention should be given to the review of land use policies to resolve the extensive reports of unavailability of land and to the scaling-up of agricultural extension services for farming and livestock.

Coverage and quality of agricultural extension services are insufficient. The external assistance community should advocate for increased attention and resource allocation for veterinary and cultivation extension services, and work together with the Government of Sri Lanka to build its capacity.

21 Conclusions and recommendations

21.1 Conclusions

Poverty level in all sampled areas is found to be high, particularly in the Northern Province, even though the prevalence of food security and the level of household income have improved over the last six months period for the returnee population in the Northern Province.

Low income livelihoods, lack of employment opportunities and high food prices put serious stress on the economy of many households. Due to low income levels and high food prices, the majority of households in the Northern Province live below the national poverty line. As a result, there are signs of asset depletion in the Northern Province and adaptation of relatively severe coping behavior. Despite the bleak poverty picture, the income levels for returnees have risen since October 2010 in all Northern districts except in Killinochchi. Although the proportion of households who live above the poverty line has increased sharply, the actual amount of income increases is small. In no district in the Northern Province did the median income increase more than 30 rupees per person per day from October 2010 to April 2011.

Food intake displays a clear deterioration from October 2010 to April 2011 among returnees in the Northern Province. A simultaneous and significant reduction of food assistance suggests that food assistance played an important role in maintaining adequate food intake among the returnee population and as assistance was scaled down, the dietary intake of households showed deterioration to levels below what is required. Household food intake in Killinochchi is serious and requires immediate attention. A similar deterioration in food consumption is feared in Mullaitivu district where WFP food assistance will be scaled down in the coming months.

Batticaloa is also a cause for concern. The dramatic floods in January and February affected nearly the entire population and on many food insecurity indicators the district now performs as poorly as the Northern Province. The districts of Ampara and Trincomalee were also affected. The floods coincided with the major agricultural season and as a result, vast areas of standing crops were washed away or submerged. Although very serious, the flood impact on livelihoods is believed to be subsiding. However, in some areas (particularly those where *yala* is not cultivated) the situation may not be normalized until early 2012.

Anuradhapura district in the North Central Province is consistently less vulnerable and more food secure than other surveyed areas and fared relatively better also before the floods. Polonnaruwa, also in the North Central Province, exhibits similar levels of food security as Trincomalee and Ampara. The district has important food security difficulties.

The total number of food insecure persons in the sampled area is 1.7 million, 78 percent of whom are in the Northern and Eastern Provinces. The severely food insecure population, 82 percent of whom are in the Northern and Eastern Provinces, require timely food security interventions. For this very large food insecure population, food security interventions are needed to create capacity and productive assets. Most urgent action is needed in Killinochchi because of the trend of income

poverty and food intake. The district of Mullaitivu requires close monitoring in the near future as reduced food assistance may cause dangerous food security difficulties.

Given widespread food insecurity, innovative food assistance interventions – as part of an overall strategy to rebuild livelihoods – remain a natural and recommended modality of assistance.

21.2 Recommendations

- High prevalence of income poverty, especially in the Northern Province, underlines the importance of livelihood development and safety net initiatives.
- Livelihood recovery and development must continue in returnee areas, but also in areas affected by heavy flooding in late 2010 and early 2011. Therefore, a comprehensive and sustained development strategy to improve livelihoods and household skill-sets is required. Based on livelihood constraints faced by the population, the below thematic areas should be of priority:
 - Work projects aimed at creating productive household assets and removing factors constraining livelihoods development should be considered high priority interventions. Much of this assistance would target households engaged in agricultural livelihoods. Conflict and/or flood affected areas where households are in an initial stage of livelihood rehabilitation would be of most immediate concern.
 - The availability and price of land is by far the largest constraint to paddy cultivation. Further study is required to develop an environmentally sound strategy to increase farmers' access to land.
 - The climate is also an important challenge for agricultural households. The capacity of households to mitigate and manage the many effects of unpredictable climate and natural disasters should be strengthened, through training, research and capacity building.
 - Access to agricultural inputs should be improved through strengthened agricultural services such as production of fingerlings, plant breeding and seed supply. In the short run free distribution of seeds, tools, water pumps and other agricultural inputs is necessary.
 - The price, quality and coverage of agricultural and veterinary services are major impediment to growth in the agriculture sector. Coverage and quality of agricultural extension services was deemed by many respondents as insufficient. Therefore, increased attention and resource allocation should be devoted to agricultural and veterinary extension services.
 - Wild and stray animals are a major challenge for cultivators in many parts of the country. The relationship is complicated and without an easy solution and would require further study to improve.
 - The possibility of increasing land for cultivation, access to land and other facilities for agriculture to the returnees and IDPs in Jaffna, should be explored.
 - Investments into agricultural infrastructure is required, particularly improvements and possibly extension of irrigation systems and agro wells to enable more efficient food production. The environmental effects of infrastructure development projects need to be carefully studied to guarantee long term sustainability.

- Household level infrastructure, such as back-yard wells, could, when possible, also be an important method of addressing widely reported water shortage.
- The high price of agricultural inputs, including re-stocking of animal herds, is a constraint faced by many. The income generating capacity of agricultural livelihoods and the cost structure in the agricultural input market should be studied, based on which programs to improve farmers' access to inputs and business profitability could be designed.
- The non-availability and high price of fishing gear are the major constraints to fishing. Therefore, the possibility of improving the purchasing power or credit access of fishing households or decreasing the cost of inputs have the potential of developing the livelihoods of fishing communities and should be explored.
- The development of skills in high demand is important, particularly for households nor primarily engaged in agriculture. Through training, households can establish a sustainable income generation capacity and minimize long-term dependence on assistance.
- There is a need to extend assistance to flood affected and vulnerable households while they rebuild their livelihoods. Some communities, especially those not able to cultivate *yala*, will require assistance until the *maha* harvest in early 2012.
- For populations that exhibit severe food insecurity and limited productive capacity, including vulnerable groups, it is essential to provide broad hunger solutions to safeguard against worsening health or nutritional status.
 - Populations with deteriorating food intake, especially the population in Killinochchi, require immediate food assistance, targeted to the most food insecure.
 - In populations where a reduction in food assistance is expected, the food security situation needs to be monitored carefully to determine if the reduction is resulting in increased food insecurity.
 - Unconditional safety nets without a work or training requirement will be necessary for vulnerable groups, including food insecure households without able-bodied adults. Vulnerable population groups such as households headed by a widow/widower, an older person or a female, and households with disabled persons are more vulnerable than the general population. Therefore, it is recommended that their needs are selectively addressed using special assistance modalities as many of them may not be able to participate in work activities.
 - Given that the coverage and capacity of government run social safety nets are relative better in the Eastern and North Central Province, it is in many cases natural for external assistance in the form of direct implementation to focus on the Northern Province. Still, both capacity building and direct implementation is required also in other parts of the country.
 - The development community should advocate for and assist in the extension of government safety net programs, such as Samurdhi, into newly resettled areas.

- Innovative distribution mechanisms for food assistance, including food voucher programs, has the potential of incentivizing local food production, encouraging market actors, proliferating market access and enabling households to purchase more nutritious foods than those included in food aid rations. Therefore, vouchers could be piloted in 2011 and based on results, a possibly sizable voucher component could be considered for the planning of interventions in 2012.
- Given prevalent food insecurity, food assistance should remain a natural component of livelihood development and safety net programs.
- A system for monitoring food security conditions in vulnerable populations, especially in the Northern Province, should be established. With uncertainty about the future direction of key food security indicators, it is important that a food security monitoring system is put in place to detect sudden deterioration in conditions. The system could also function as a transparent tool to target assistance and interventions.

Annex 1: Glossary

General population	The total population in the study area at the time of the survey (including recent returnees and others).
Household	Household is a unit of one or more persons living together with a common arrangement for cooking and partaking food.
Land owning farmer	One who cultivates his own lands.
Primary income	Household income source that accounts for the largest proportion of the household's income.
Recent returned household	Displaced person who return after May 2009 (only applicable for the Northern Province).
Relocated household	Displaced person who returned to area different from their place of origin.
Resettled household	Displaced person who returned to their place of origin.
Returned household	Displaced person who returned to area different from their place of origin or any other place (relocated and resettled).
Subsistence farmer	Farming household who produced food mostly or exclusively for consumption in the household.
Tenant farmer	One who cultivates land belonging to someone else in exchange for a share of production (rent).

Annex 2 : Detailed expenditure breakdown

Table 9 : Household expenditure breakdown (share of household expenditures)

	Northern Province	Eastern Province	North Central Province
Rice	13%	13%	6%
Bread	10%	4%	1%
Pulses	3%	3%	3%
Fish	8%	8%	5%
Meat	2%	5%	2%
Eggs	1%	1%	1%
Curd	0%	1%	0%
Oil	3%	3%	4%
Milk	2%	4%	4%
Vegetables	7%	7%	9%
Fruits	1%	1%	1%
Coconut products	5%	6%	4%
Sugar	6%	5%	4%
Prepared food	0%	1%	1%
Special nutritional food	0%	0%	0%
Other food items	1%	2%	2%
Payments on debts	6%	4%	4%
Milling	1%	1%	1%
House rent	0%	0%	0%
Education	6%	6%	8%
Consumable households items	4%	5%	4%
Cooking fuel/firewood	2%	2%	0%
Transportation and communications	3%	3%	5%
Livelihood inputs	1%	1%	3%
Veterinary services and animal feed	0%	0%	0%
Hiring labor	1%	1%	6%
Alcohol	1%	1%	1%
Gifts to others	1%	2%	2%
Water	0%	0%	1%
Electricity	1%	2%	2%
House constructions and repairs	5%	1%	4%
Other household items	0%	1%	1%
Health care	2%	2%	5%
Clothing and shoes	3%	3%	2%
Social events	1%	1%	1%
Fines and taxes	0%	0%	0%
Other non-food items	0%	0%	1%



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