



Food and Agriculture Organization
of the United Nations

Socio-economic impact and needs assessment

Donbass • Ukraine



Socio-Economic impact and needs assessment

Donbass - Ukraine

Dragan ANGELOVSKI

FOOD AND AGRICULTURE ORGANIZATION
OF THE UNITED NATIONS

Kyiv, 2015

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

ISBN 978-92-5-108990-5
© FAO, 2015

FAO encourages the use, reproduction and dissemination of material in this information product. Except where otherwise indicated, material may be copied, downloaded and printed for private study, research and teaching purposes, or for use in non-commercial products or services, provided that appropriate acknowledgement of FAO as the source and copyright holder is given and that FAO's endorsement of users' views, products or services is not implied in any way.

All requests for translation and adaptation rights and for resale and other commercial use rights should be made via www.fao.org/contact-us/licence-request or addressed to copyright@fao.org.
FAO information products are available on the FAO website (www.fao.org/publications) and can be purchased through publications-sales@fao.org.

Table of contents

Table of contents	II
List of figures.....	III
Executive summary.....	IV
Methodology and data.....	IV
Background	1
Agriculture in Ukraine and Donbass.....	1
The conflict in Ukraine and Donbass	2
Methodology and data.....	4
Conceptual framework	4
Level of reliability and sample size	4
Sampling methodology	5
Results	7
Demographic indicators.....	7
Economic indicators.....	9
Food security and coping mechanisms.....	17
Agricultural production	20
Assistance received.....	31
Farmers' organizations	34
Conclusions.....	35
Recommendations for recovery	38
Annex 1- Additional information per target area	41
Annex 2 - Target population	42
Annex 3 - Household questionnaire	43

List of abbreviations

GCA	Government control area
GCB	Exclusion zone in proximity to government controlled territory
FAO	Food and Agriculture Organization
FSC	Food Security Cluster
Ha	Hectares
HRP	Humanitarian Response Plan
IDP	Internally Displaced Person
Kg	Kilogram
MAPF	Ministry of Agrarian Policy and Food of Ukraine
NGCA	Non-government control area
NGCB	Exclusion zone in proximity to the Non-government controlled territory
NGO	Non-Governmental Organization
REU	FAO Regional Office for Europe and Central Asia
SRP	Strategic Response Plan
UAH	Ukrainian Hryvna
UN	United Nations
USD	United States Dollar
USD	United States Dollar
WFP	World Food Programme

List of figures

- Graph 1: Sample shares per area
- Graph 2: Sex of the respondents
- Graph 3: Respondent relation to HH
- Graph 4: Household size (without IDPs)
- Graph 5: Household Composition
- Graph 6: Household composition - age
- Graph 7: Share of women in population
- Graph 8: Decision makers
- Graph 9: Education of the HH
- Graph 10: Population directly affected
- Graph 11: Months affected by conflict
- Graph 12: Cash earners
- Graph 13: Average annual income (USD)
- Graph 14: Income variations
- Graph 15: Income sources - First priority
- Graph 16: Income sources - Second priority
- Graph 17: Income sources evaluation
- Graph 18: Debts per household
- Graph 19: Debts value UAH
- Graph 20: Access to finance
- Graph 21: Access to finance sources
- Graph 22: Migration and remittances
- Graph 23: Share of households with migrants
- Graph 24: Migration reasons
- Graph 25: Food security coping strategies
- Graph 26: Difficulties encountered
- Graph 27: Lack of cash for basic needs
- Graph 28: Coping mechanisms
- Graph 29: Arrangements for land cultivated
- Graph 30: Average sizes of land cultivated
- Graph 31: Share of producers
- Graph 32: Production in months
- Graph 33: Cultivation of land
- Graph 34: Agri labour division
- Graph 35: Irrigation
- Graph 36: Sources of fertilisers
- Graph 37: Sources of seeds
- Graph 38: Access to markets
- Graph 39: Constraints access to markets
- Graph 40: Assets linked to agricultural production
- Graph 41: Livestock owner households
- Graph 42: Average number of livestock
- Graph 43: Ownership and loses of livestock
- Graph 44: Share of livestock owners selling produce
- Graph 45: Share of products sold
- Graph 46: Use of produce last season
- Graph 47: Average sale income USD
- Graph 48: Constraints for animal production
- Graph 49: Conflict impact
- Graph 50: Increase of prices of agricultural inputs
- Graph 51: Reason for increase of prices of agricultural inputs
- Graph 52: Plant production needs
- Graph 53: Livestock production needs
- Graph 54: Assistance provided and received
- Graph 55: Assistance received
- Graph 56: Share of households receiving assistance
- Graph 57: Motivation for joining a Farmer Organization

Executive summary

Affirmation

This report was prepared on behalf of FAO Ukraine by a team consisting of Dragan Angelovski (author), Matthias Mollet and Neil Marsland (Editors).

Our thanks for the excellent collaboration go especially to Farrukh, Toirov, Elena Prorochenko, Pridon Japaridze, Yuriy Nesterov and Yana Voitovska whose support and contribution was crucial for the successful realization of the research.

A very special thank you goes to the respondents who were willing to share their experience and to openly discuss the barriers and obstacles they face in their daily lives.

Background

The political crisis that resulted in unrest in the Donetsk and Luhansk regions of Ukraine evolved into a war between the post-revolutionary Ukrainian government and pro-Russian insurgents.

The agricultural sector in the two oblasts has suffered enormous losses due to the conflict and ensuing instability. Prices for basic foods have increased dramatically due to disruption of trade links and a significant reduction in local production. With the high price of fuel on the market, growing insecurity, devaluation of the Ukrainian hryvnia against the US dollar, and increased transportation costs, prices for most agricultural inputs have risen.

Limited availability of inputs, fuel and credit are the main constraint. Many households are limited in their ability to engage in agricultural production, which can be expected to lead to erosion of food security.

As part of the coordinated United Nations response, the Food Security Cluster has been activated and a Strategic Response Plan rolled out. Needs in the agricultural sector have been presented and the Humanitarian Response Plan needs to be adjusted based on an accurate evaluation of the situation, including needs of the conflict-affected population.

Conceptual framework

This report presents an analysis of social and economic vulnerability in the conflict-affected Donbas region of Ukraine, with a particular focus on rural people living along the engagement line. The study measures the economic and social vulnerability of 662 933 residents (229 696 households), investigating their level of exposure to shocks and prevalent coping strategies.

Methodology and data

Based on the conceptual framework, assessment vulnerability indicators were defined (i.e. household resources, use of resources, exposure to risk, and coping strategies) and adapted to the specific situation.

A total sample for the assessment consisted of 648 interviews, of which half were conducted in Donetsk and half in Luhansk region. The level of reliability is valid for the heavy weapon exclusion zone, the Government Control area, and the Non-Government Control area.

The actual sampling was executed in several different steps, starting at the administrative level of each area and ending at the smallest unit, in this case households.

Before commencing the interviews, FAO designed, pre-tested and adjusted the questionnaires, based on feedback and recommendations received.

Trained interviewers visited the targeted communities at different times of day. No age limit was applied to the respondents, apart from excluding underage persons.

The field work and data entry were outsourced to a local NGO. Quality control, data analysis and reporting were conducted by FAO experts.

Main results

Availability of resources is an important aspect determining the resilience of households against shocks, and as such their economic and social vulnerability. Household resources include financial, physical, human and social resources. Each resource dimension protects the household in different ways.

The availability of sufficient financial and physical resources allows households to smooth consumption over time, and reduce the risk of falling into monetary poverty in the event of a shock.

The availability of human resources determines the current and future earning power of a household.

Social resources are important for social inclusion and participation in family and community life. Access to a broad social network in the event of a shock can facilitate food security, finding work, gaining access to informal financial support, or simply accessing information.

The size of a household, its composition and type of income are the main determinants of vulnerability. The size of households in the conflict-affected population is very small, averaging less than three persons per household. The composition of an average household is two adults and less than one minor, indicating an aging population and outmigration.

More than a third of the population has reached retirement age, and the share of women in the population is slightly more than half.

Decisions in the households are made equally by men, women, or through consensus of the spouses, which is in line with the high educational level of the respondents.

The conflict has directly affected food security, incomes, consumption, and overall livelihoods of the surveyed population, in both qualitative and quantitative terms. At least 65 percent of the total population (421 422 persons) have been directly affected by the conflict and have suffered from shocks within the past year.

More than 50 percent of the population has been exposed to prolonged effects of the conflict, with an average recorded duration for the Non-Government Control areas of 12.5 months, and for the Government Control areas 10.2 months. In Non-Government Control areas, 86.4 percent of households were affected compared to 29 percent of households in the Government Control areas.

Exposure to covariate shocks is very high, while exposure to idiosyncratic shocks is somewhat lower, depending on the coping capacity of households. The frequency of family-related shocks (loss of employment) is lower compared to livelihood shocks.

Resource (economic / monetary) vulnerability is more widespread (75 percent) than access vulnerability (50 percent), with at least half of the population vulnerable in both dimensions.

The average number of cash earners per household is two and this decreased by approximately 10 percent during the conflict. The monthly income of the average household is calculated at USD 65.4, with 75 percent of households having incomes lower than the average national wage and being vulnerable from a monetary perspective.

Pensions are the most important income source for the households, followed by sales of agricultural produce, particularly in the Non-Government Control area. Since the conflict started, 9 percent of households in the Government Control areas and 13.6 percent in the Non-Government Control areas have changed their main source of income, due mainly to lower employment rates in the private and government sector, as well as lower levels of activity in the self-employment sector.

Stable / permanent jobs have decreased by 7.6 percent, daily / casual jobs have increased by 8.8 percent, and agricultural income has remained the same with minor fluctuations.

On average, 30.4 percent of households have average debts of UAH 5 934 (USD 270). Debts have doubled in number but reduced in amount. Debt affects 62 278 households, indicating that the population is borrowing only to cover the basic cost of living.

The commercial credit system has almost no role, as it fails to enable access to funds for the population. Slightly more than a third of respondents have access to credit, although commercial credits are available to a very small share of the population. The majority of respondents rely on their social networks for cash.

Since the start of the conflict, 16.5 percent of households have members who have migrated, with an average of 1.59 migrant family members. More than half of migrants have left due to insecurity while a quarter have moved in pursuit of employment. The Non-Government Control areas have twice as many migrants as Government Control areas.

Food security has been affected mainly from a qualitative standpoint, as agricultural production has managed to prevent severe food insecurity. Almost all households used food security coping strategies, implementing on average 3.57 different mechanisms.

The most prominent livelihood difficulty faced by the population is high food prices, identified by 41 percent of respondents, followed by high transport / fuel prices. The majority of respondents are also unable to meet their non-food needs due to lack of cash.

Resource (economic / monetary) vulnerability is more widespread (75 percent) than access vulnerability (50 percent), with at least half the population vulnerable in both dimensions.

Almost all households used food security coping strategies, while well over half implemented additional coping strategies for reduction of household expenditures, economizing on use of goods and services and changing consumption patterns. Incurring debts and sale of assets have been used as coping strategies by a little less than one-fifth of respondents. More than 10 percent (22 970) of households referred to devastating measures, such as taking a child out of school, begging, prostitution, etc., as an increasing share of households are unable to reduce other expenses.

With 95 percent of households having access to land, 91 percent engaged in plant production and 66.4 percent in livestock production, the vast majority of respondents are subsistence farmers. Agriculture is a safety net supporting rural livelihoods.

Cultivated land area has been decreasing over the past 18 months since the conflict began, although most of the respondents have remained engaged in agricultural production. Since the beginning of the

conflict, total cultivated area among the affected households has decreased by some 30 percent or 53 000 hectares.

Cropping patterns are shifting towards backyard production of high-value crops. Poultry is the most commonly owned type of livestock (around 60 percent of livestock-owning households in both cases). Cattle are owned by one-fifth of livestock owners in the Government Control areas and by one-fourth in the Non-Government Control areas. Sheep and goats are owned by a smaller proportion of livestock-owning households. The average number of animals per household is significantly greater in the Government Control areas.

More than half of livestock producers (65 243 households) reported destocking, mainly due to lack of animal feed, which is a direct result of increased prices, changes in cropping patterns, reduced yields, and limited access to markets.

Higher shares of destocking were recorded for cattle and pigs, as well as beehives, and to a lesser extent sheep, goats, poultry, and rabbits.

The main difficulties faced by livestock-owning households are, in decreasing order of frequency: lack of cash, lack of food / access to pastures, lack of herders / manpower, lack of surplus production for selling, and disadvantageous terms for selling live animals.

On average, at least 70 percent of total production is consumed within the household, 5-15 percent is sold, and 5-10 percent is donated.

Women participate slightly more in overall labour, in line with the traditional division of labour by type of production.

Most of the respondents face challenges in maintaining their agricultural production due to increasing input prices and hampered access to markets for both inputs and produce.

Many of the producers rely on their own seeds and fertilizer, which ultimately erodes their productivity. Overall, 57.4 percent of households have at least one difficulty in access to markets, with a higher share recorded in Non-Government Control areas (69.1 percent) compared to Government Control areas (45.7 percent). The main market access challenges faced by the households are: physical access (one-third of households in both areas) and insecurity in the Non-Government Control areas.

The conflict-affected population has relied mainly on social networks for support in addressing food insecurity. 22.8 percent of households in the Government Control areas have received some kind of food or cash support from family members, compared with 46.3 percent of households in the Non-Government Control areas – a reflection of the greater need for support. The share of beneficiaries providing support to other households (40 percent) confirms the value of maintaining household resilience capacity within the rural / agricultural sector.

The results undoubtedly show that social networks associated with the rural / agricultural sector have easily matched the overall support provided by all other state and international actors.

External assistance provided to the households has been focused mainly on food distribution, supporting much of the population in the Non-Government Control areas and less than a third of respondents in the Government Control areas. Other sectors have received only symbolic support, including the agricultural sector. A decreasing overall trend in the provision of assistance to the affected population is notable.

Conclusions

As a result of the conflict, incomes have fallen and the onset of monetary poverty is more likely. The worsening economy affects access to credit, directly limiting different aspects of life and wellbeing. A feeling of hopelessness sets in, as access to credit for smallholders is unlikely to improve and more likely to fluctuate in parallel with insecurity.

Agricultural production in rural areas protects food security by providing a safety net for the producers themselves and for the population they support.

The conflict is affecting the commerce and logistics of agricultural inputs, with prices all but doubling, further increasing food prices.

The specific primary impact is a very substantial number of rural residents reducing their expenditures to the most basic needs, and unable to reinvest in next season's agricultural production.

During the protracted conflict, a portion of livestock has been lost / destocked, and cropping patterns have shifted towards extensive production. Productivity has declined, eroding sustainability of the rural-agricultural complex as first impact, increasing food prices and food insecurity as second impact, and further contributing to monetary poverty.

High food prices take the biggest toll on the daily lives of the population. They outweigh even security-related problems, heralding the onset of monetary poverty and consequently food insecurity.

Key needs

In the agricultural sector, lack of inputs is perceived as by far the most important impact of the conflict, followed by outbreak of diseases, lack of manpower, and land degradation. Limited access to agricultural inputs is mainly the result of increasing poverty, and rising prices of agricultural inputs (up by 86.2 percent).

The most urgently needed forms of support are agricultural inputs and animal feed, which have become unaffordable to the population, in addition to being in short supply or physically inaccessible to more than 150 000 households. Additional needs include restocking of live animals, plant protection for control of pests and diseases, and appropriate agricultural equipment and tools.

For plant production and propagation, fertilizers and tools are the top-priority needs in order to restart or maintain production. For maintaining and improving livestock production, animal feed is the most needed type of support, followed by restocking of lost animals.

The Non-Government Control areas have felt a significantly greater impact on agricultural production and incomes, indicating a greater need of support.

Unsupported, the subsistence agriculture sector is expected to continue having difficulties in meeting its needs for continued production, and can be expected to further contract, affecting the sustainability of livelihoods and ultimately the food security of the affected population.

The overall value of support required by the most vulnerable population is estimated at approximately USD 6 million, while necessary support for the most affected population is estimated at approximately USD 20 million.

Recommendations

There is a significant and urgent need to support the subsistence production needs of the affected population, stabilizing agricultural activities. Addressing these needs would provide sustainable support to food security and incomes, at the same time facilitating return of the sizeable internally displaced population.

Productive capacities need to be supported and the target groups need to be helped to meet their immediate needs for agricultural / food production through support programmes that recover, maintain and improve the level of production and productivity and add to their income-generating capacity.

Bearing in mind the agricultural profiles of the target population and the constraints identified, the following interventions targeting the agricultural sector are recommended as an immediate response to the deteriorating situation:

1. **Food security programmes** to improve access to agricultural inputs and animal feed, in order to ensure and increase levels of productivity of food crops and animal production among subsistence farmers, increasing their self-sufficiency and self-reliance.
2. **Livelihood programmes** to foster the income-generating agricultural activities of commercial producers of high-value crops and animal products, increasing market supply and stabilizing food prices.
3. **Recovery of livestock herds** in the target areas and improved access to animal protein as a vital component for preserving food security and nutrition levels among the conflict-affected population.

Background

Agriculture in Ukraine and Donbass

Ukraine agriculture has been evolving since the country achieved independence in 1991, following the breakup of the Soviet Union. The first round of farm reforms in 1992-93 initiated privatization of land through the distribution of paper shares to the rural population and mandated the transformation of former collective and state farms into corporate shareholder structures.

The second round of reforms began in December 1999 when the corporate farms were obliged by presidential decree to convert the paper land shares into fully titled land plots for their shareholders. Most new shareholders leased their land back to newly-formed private agricultural associations.

The sudden loss of state agricultural subsidies had a significant effect on every aspect of Ukrainian agriculture. Fertilizer use fell significantly over a ten-year period, and subsequently so did grain production. Farms were forced to cope with fleets of old machinery. However, at the same time, the emergence from the Soviet-style command economy enabled farmers to make increasingly market-based decisions regarding crop selection and management, which contributed to increased efficiency in both the livestock and crop-production sectors.

Though Donetsk and Luhansk regions are considered mainly industrial areas, a large number of people especially in the western part of Donetsk and northern part of Luhansk are dependent on agriculture.¹ Agriculture (including livestock) is the second largest sector in Donetsk and Luhansk regions after industry.

Agriculture is a well-developed sector with about 1 295 000 hectares of arable land (about 48.9 percent of total area), out of which 988 000 hectares (about 59.1 percent of total area) are cultivated in the Donetsk and Luhansk regions respectively,² on some of the largest farmers' enterprises in the country.

Livestock is also important in the Donetsk region, which has some of the largest poultry-production holdings. The area is also considered as the breadbasket of the East, producing winter wheat, spring corn, barley and vegetables. It has a significant production capacity, which is sufficient for meeting the domestic needs of the region with a surplus (and exports).

The consolidation of small farms into market-oriented larger farms and more viable enterprises progressed relatively well and many farms succeeded under good leadership, in spite of fluctuating grain prices and constraints on access to finance. The transition of the agricultural sector from a command economy to a more market-oriented system introduced the element of fiscal responsibility, and farm managers strived to improve the efficiency of their enterprises. Decisions on crop selection, fertilizer application, use of machinery, harvesting methods, grain storage, and all other aspects of farm management were oriented towards development and profitability.

During the transition many small market-oriented farming holdings with up to 100 ha of land were registered and involved in commercial agricultural production. Prior to the crisis, approximately 1 100 and 1 200 such smallholdings were registered in the Donetsk and Luhansk regions respectively. More

¹ Agriculture is fourth in importance; it employs around 310 000 workers or about 10 percent of the labour force.

² According to the data available, 929 000 ha of land in Donetsk Oblast are located in the government-controlled territory, whereas the remaining 356 000 ha are located in the non-government-controlled territory. Similarly, in Luhansk Oblast 779 000 ha of land are located in the government controlled territory and 209 000 ha are located in the non-government-controlled territory.

than 109 000 farming entities were registered in the Donetsk region and about 57 000 in Luhansk region before the conflict.

Small family farms cultivate small agricultural plots and plant mainly vegetables including potatoes. Nearly 90 percent of the region's vegetables and virtually all of the potatoes are produced by small family farms. Most of the family farms keep a few heads of cattle and other livestock. The meat and milk produced are used mainly for their subsistence needs and any surplus is sold in the local markets, which provides them with supplementary incomes. Some of the villages in northern Luhansk have met 70 percent of the total local milk needs. Milk produced at the household level is collected by traders and sold in the local markets.

Many rural residents also practice subsistence farming on very small land plots and in their back gardens, but they are not registered as farmers. They grow potatoes and other vegetables, as well as fruit trees (apples, pears, plums, apricots, peaches etc.), and keep a few heads of livestock (mainly cattle, pigs, goats and poultry). Subsistence farming mainly provides for household food security and nutrition; however, occasional sales of surpluses also generate cash for the families, in particular through the sale of eggs, meat and milk products.

The conflict in Ukraine and Donbass

The political crisis resulted in unrest in Donetsk and Luhansk regions of Ukraine, which evolved into a war between the post-revolutionary Ukrainian government and pro-Russian insurgents.

Protests escalated into a conflict between the self-declared Donetsk and Luhansk People's Republics, and the Ukrainian government.

A deal to establish a ceasefire, called the Minsk Protocol, was signed on 5 September 2014. Violations of the ceasefire were common, and it completely collapsed in January 2015. Heavy fighting resumed across the conflict zone, including at Donetsk International Airport and Debaltseve. A new ceasefire agreement, called Minsk II, was signed on 12 February.

The ongoing conflict in the Donetsk and Luhansk regions is severely affecting the agricultural sector across the whole of eastern Ukraine.³ Many farming enterprises reported partial losses of the winter wheat harvest (June-July 2014).

The agricultural sector of the two Oblasts suffered enormous losses due to the conflict and instabilities. The number of reported and registered livestock killed reached more than 10 034 heads of cattle and about 160 000 heads of poultry. A much larger number of animals killed were not reported especially in rural areas, where access to veterinary services is limited.

Prices of basic foods have increased dramatically due to disruption of trade links and significant reduction of the local production. With the high price of fuel in the market growing insecurity, there has been a devaluation of the hryvnia against the dollar and transportation costs have increased (alternative routes across several checkpoints). The prices of most agricultural inputs have also risen. Similarly, prices of herbicides and pesticides have risen, potentially affecting production. The limited availability of inputs, fuel and access to credit remains the main constraint.

Small farmers, many of whom are shareholders in farming enterprises and mostly unregistered producers, including pensioners, have lost a significant source of income, ranging between UAH 600 and 1 300 per hectare per year.⁴

³ Including the neighbouring Regions of Kharkivsk, Dnipropetrovsk and Zaporizhiya

With the increase in prices, lost and reduced incomes, devaluation of the currency, and the need to meet the increased costs (including house repair works), the capacity of many of the affected households is limited to engage/re-engage in agricultural production. Some of them reported that they were forced to slaughter their livestock, and with the winter approaching the number will likely increase.

An influx of internally displaced persons from conflict-affected areas has added to the gravity of the situation. Many are currently residing in collective centres, with little prospect of employment and high dependency on external food, cash and non-food assistance.

The food security cluster (FSC), led by WFP, has been activated in Ukraine and is currently coordinating food assistance in the conflict-affected areas. The Strategic Response Plan (SRP) rolled out in 2014 has been revised and the needs in the agricultural sector have been presented in the revised Humanitarian Response Plan (HRP).

⁴ Average monthly income in Ukraine is estimated at about UAH 3 863 in March 2015 (Source: <http://index.minfin.com.ua/index/average/>)

Methodology and data

Conceptual framework

The purpose of the assessment is to study and evaluate the socio-economic impacts, status and needs of the conflict affected population in the Donbas region of Ukraine.

The assessment analyses the livelihoods of the conflict affected rural households in the Donetsk and Luhansk administrative regions, and it takes into account both rural households not engaged in agriculture, as well as farming households engaged in substance production and commercial farming.

Based on the conceptual framework, the assessment indicators were defined in order to allow the development of the household status profiles.

This assessment considers the status of the surveyed households from multiple perspectives and tries to determine the overall response of the households to the conflict. In particular, the assessment aims to 1) analyse and evaluate the increase in vulnerabilities, 2) the impact on the lifestyles, 3) the abilities of the households to cope with the shocks and 4) the needs for improvement of their livelihoods.

Integrally, the assessment considers the availability of resources as an important aspect for determining households resilience which can be of different form, including: financial, physical, human and social resources.

Each resource dimension protects the household in different ways, and for the purposes of this assessment the availability of the following resources has been considered and assessed:

- Financial resources allow households to meet consumption needs over time and reduce the risk of falling into poverty in the event of a shock impacting their incomes.
- Physical resources go beyond the purely financial protection of households and provide an indication of the living condition of a household.
- Human resources determine the current and future earning power of a household. The more employed adult household members, the less the vulnerability of the household against unemployment. Finally, good health has positive effects on the learning abilities of children and increases the chance of having work for adults.
- Lastly, social resources are important for social inclusion and the participation in family and community life. Access to a broad social network is beneficial in the event of a shock. It can facilitate finding work, providing access to informal financial support, or simply be a source of information.

The methodology for this assessment follows a two-step approach. First, each indicator is analysed separately using descriptive statistics, providing an overview of the most common problems faced and the resulting needs for each of the target areas. Second, the descriptive analysis is further complemented with a multivariate analysis of the key indicators.

Level of reliability and sample size

The assessment targeted the rural population residing in the Donetsk and Luhansk regions, on both sides of the contact line, as provided in Annex 2.

The numbers of households provided in the assessment were calculated using the average household sizes obtained from the survey results, for each of the target areas.

In order to reach a reliability level of 85 percent in each of the target areas, the total sample for the assessment consisted of 648 interviews, half of which were conducted in Donetsk and half in the Luhansk region.

Total target population			
Area	GCA	NGCA	Total
Persons	399 254	263 680	662 933
Households	145 183	84 513	229 696

Socio-Economic impact and needs assessment – Donbas region - Ukraine

Based on the following formulas, usually used for socio economic studies in rural areas, the sample size was calculated, aiming at an 85 percent reliability level:

$$SS = \frac{Z^2 * (p) * (1-p)}{C^2}$$

Z = Z value (e.g. 1.96 for 95% confidence level)
 p = share picking a choice, expressed as decimal (0.5 used for sample size needed)
 C = confidence interval, expressed as decimal (e.g., .05 = ±5)
 SS = sample size

The obtained Sample Size (SS) was adjusted to the population size of the targeted area where the reliability was applied using the following formula:

$$\text{Adj. SS} = \frac{SS}{1 + \frac{SS - 1}{\text{Pop.}}}$$

Adj. Ss = adjusted sample size
 Pop. = population size
 SS = sample size

The level of reliability for this survey is valid for of the following areas:

- 1) heavy weapon exclusion zone (contact line)
- 2) **G**overnment **C**ontrol **A**rea (**GCA**) and
- 3) **N**on-**G**overnment **C**ontrol **A**rea (**NGCA**).

One third of the total sample was dedicated to each of those three areas to be assessed.

However, in order to capture the differences on both sides of the borderline, the sample for the exclusion zone was further subdivided into: heavy weapon exclusion zone in proximity to the **G**overnment **C**ontrolled **A**rea (**GCB** in further references) and heavy weapon exclusion zone in proximity to the **N**on-**G**overnment **C**ontrolled **A**rea (**NGCB**).

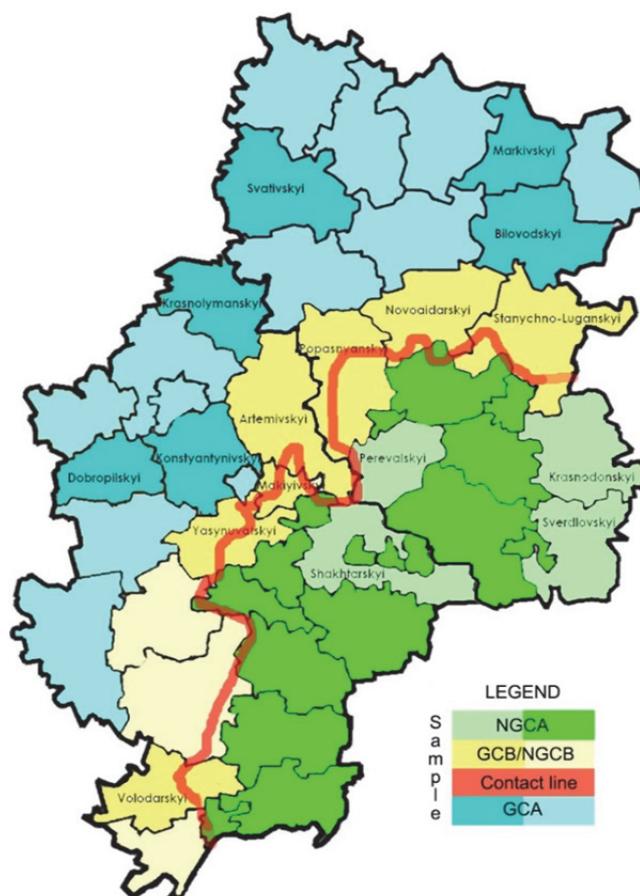
The sample composition for the assessment per share in each target area is provided in Graph 1.

Sampling methodology

The actual sampling was executed in several different steps starting at the administrative level of each target area and ending at the smallest unit, in this case the households.

- During the first stage a random selection of six rayons to be surveyed (out of all affected) was conducted for each target area;
- During the second stage: in each area twelve villages were identified through purpose sampling (accessibility / security and representativeness), by selecting two villages in each of the previously selected rayon;
- During the third stage: selection of the households at village level was conducted, using transects and a systematic selection.

Prior to the start of the interviews, FAO designed the questionnaire, which was tested and adjusted, based on the feedback and recommendations received by the interviewers.



Socio-Economic impact and needs assessment – Donbas region - Ukraine

All of the interviewers underwent training prior to the field work. The trained interviewers visited the target communities at different hours of the day, in order to capture both the residents venturing out of the communities and those remaining mainly at home.

There was no age limit applied to the respondents, apart from the exclusion of underage persons.

The work flow of the interviews is provided below:

1 person → 6 HH / day

1 team/3 persons/1 village/day → 18 HH/village

6 rayon / specific area → 18 rayon overall

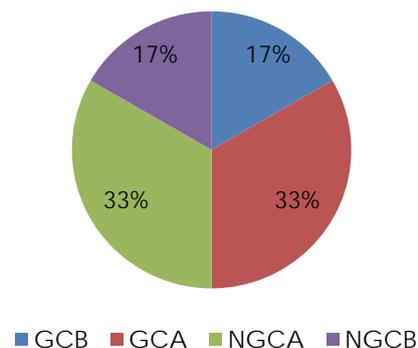
2 villages / rayon → 36 HH / rayon

12 villages / area → 216 HH / area

3 * 216 HH / specific area → 648 HH overall

The field work, testing and translation of the questionnaire, interviews at household level and the data entry process, was outsourced to an external institution (local NGO).

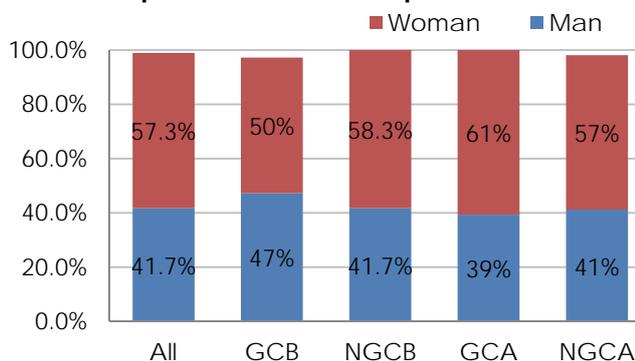
Graph 1: Sample shares per area



The period of data collection for the assessment was 24th of August to 20th of September 2015.

Quality control of the field work and data entry was ensured by FAO experts controlling the processes and cleaning the database prior to the analysis. Data analysis and reporting was conducted by FAO experts.

Graph 2: Sex of the respondents



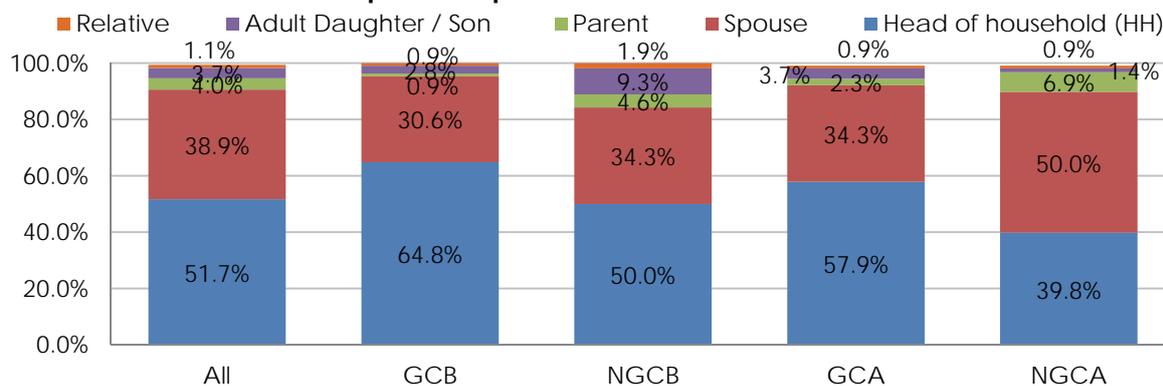
Both men and women were interviewed for the assessment. Women respondents slightly outweighed men, due to the age structure of the population and the higher employment rate (and thus the absence of men during the working hours of the day).

The share of the respondents specified by gender and target area is provided in Graph 2.

When the head of household was not present, a relative living in the household was interviewed.

The relationship of the respondents to the head of the household is provided in Graph 3, indicating that significant majority of the respondents are heads of the households or their spouses.

Graph 3: Respondent relation to HH



Results

Demographic indicators

The term household refers to all the members of a family sharing the consumption (sharing the same meal or eating together) on a daily basis and contributing directly or indirectly to the income of the household through work, cash or in kind.

Graph 4 provides the average sizes of the conflict affected households, which are very small, averaging at less than three persons per household.

The household sizes in the **Non-Government Control** areas are larger by 9 percent compared to the **Government Control** areas.

At the same time the average sizes of households in the heavy weapon exclusion zones are smaller, indicating the effect of the conflict and proximity of the engagement line on the household size.

At regional level Luhansk has slightly smaller (2.88 members/household) households compared to Donetsk (32 members per household).

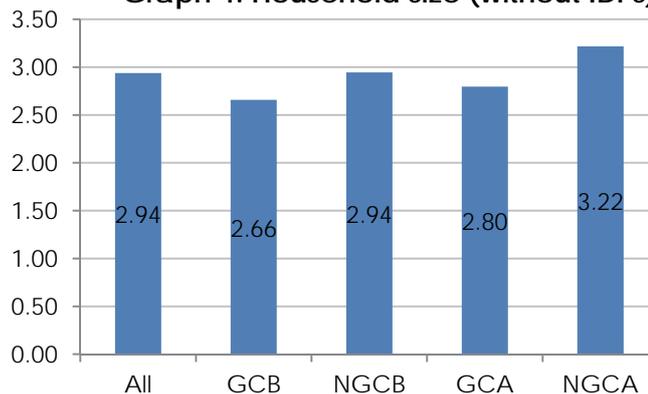
The composition of the average household is provided in Graph 5, illustrating slightly more than two adults and less than one minor per household. Bearing in mind the share of residents over

60 years old, the results indicate an aging population, a reduced share of minors, and migrants leaving a notable number of households.

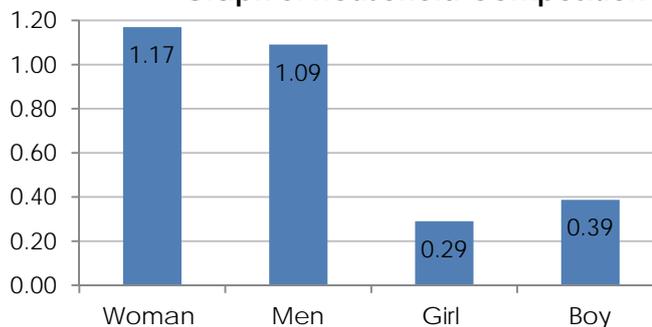
Comparison of the household composition per target area and age structure is provided in Graph 6.

The average age of 41.1 years (male: 39.4 years female: 42.7 years) is somewhat higher compared to the national average⁵ apart in women, indicating outmigration of the male population.

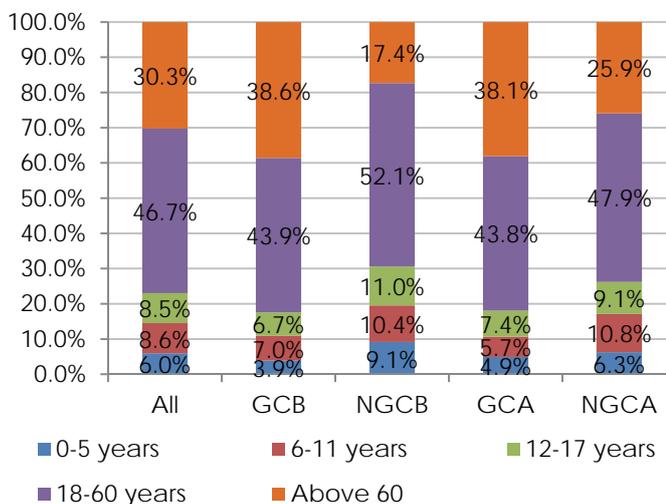
Graph 4: Household size (without IDPs)



Graph 5: Household Composition



Graph 6: Household composition - age



⁵ 40.6 years male: 37.3 years female: 43.7 years

Socio-Economic impact and needs assessment – Donbas region - Ukraine

On average, more than a third of the population has reached retirement age, less than a quarter is underage and the share of the working age population is similar across all surveyed areas.

The **Non-Government Control** areas have significantly higher share of underage persons and lower share of pensioners, indicating more limited migration possibilities from the conflict area.

Feedback from the interviewers on basis of discussions, further confirms that households in the **Non-Government Control** areas have limited possibilities to migrate towards Russia, or the rest of Ukraine, accounting for the overall larger households.

At regional level, Lugansk has slightly more underage persons and slightly fewer pensioners compared to the Donetsk region, in line with the higher contribution of the agricultural/rural sector to the region's economy and the more limited migration to the urban centres.

The average share of women in the population is slightly more than half, as provided in Graph 7.

The differences per area indicate more significant variation in the share of women in the **Non-Government Control** areas.

At regional level, no significant differences related to the share of women in the population were recorded.

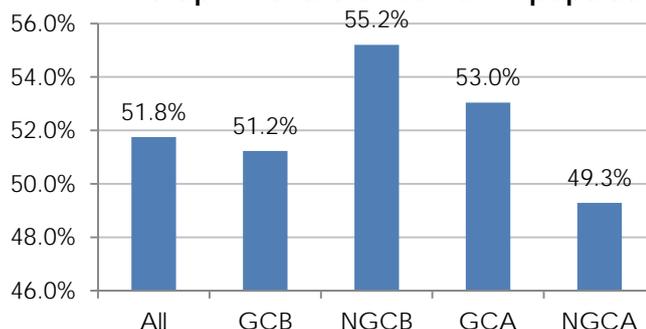
A small share (2.8 - 3.2 percent) of the interviewed households hosts IDPs, indicating that most of the IDPs sought refuge from the conflict further within the **Non-Government** or **Government Control** areas.

The average number of IDPs hosted is 2.6 person/household, significantly increasing the average size and needs of the host families, however representing overall a limited contribution to the needs of the overall population.

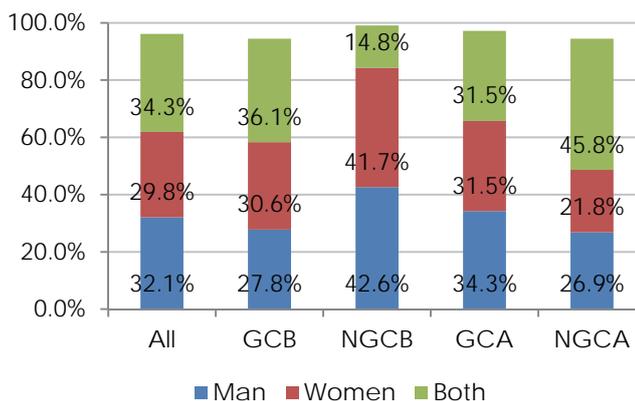
On average, equal shares of the IDPs hosed are 1) Children or parents of the host families, 2) Relatives and 3) non relatives.

The decision makers in the surveyed households are provided in Graph 8, indicating that on average in very similar shares of households, decision are made by men, women or through consensus of the spouses (both).

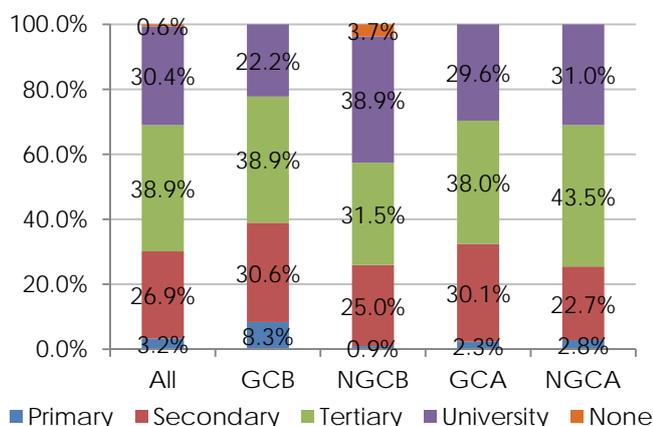
Graph 7: Share of women in population



Graph 8. Decision makers



Graph 9: Education of the HH



Significant differences are notable in the **Non-Government Control** areas (where both the smallest and the largest shares of consensus decision making are recorded).

Education is an important human resource that protects households from (monetary) poverty.

A higher level of education generally has positive effect on wages and household incomes. People with higher education have more opportunities to find jobs and earn higher incomes, thus making their families less vulnerable.

The level of education of the household head is provided in Graph 9.

On average the education level of the respondents is high, with more than two thirds having completed tertiary or higher education.

The **Non-Government Control** areas have slightly higher share of household heads with a higher level of education, compared to the **Government Control** areas, indicating that proximity to the urban centres influences the overall education level.

In parallel, the education level in Luhansk is slightly lower compared to the Donetsk region, indicating the somewhat more agricultural oriented population and economy.

Economic indicators

Financial vulnerability (lack of sufficient monetary resources) is measured by the current income level, the ability to borrow and the presence of debts. Poor households have fewer resources to cope with a shock and are more vulnerable to social and economic hazards.

Poverty indicators vary and include the percentage of people living in poverty, the depth of poverty and the poverty severity. Overall, and especially in rural areas, households headed by women with children are particularly vulnerable to poverty.

In order to determine whether a household is vulnerable from a purely monetary perspective, the results on household incomes are compared to the national average wage⁶ as a poverty threshold; assuming that households with income of over one average wage are less vulnerable to monetary poverty.

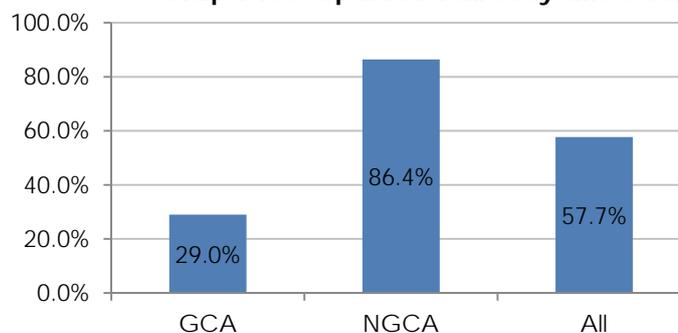
We also try to assess the effects of the conflict assess on the poverty indicators, by comparing the differences between the pre conflict situation and now.

Distribution of the conflict effects

The distribution of the conflict effects is placed in context through confirmation of the share of directly impacted households and the duration on the exposure to shocks.

The results provided in Graph 10 indicate that more than half of all respondent households have been directly affected by the conflict, although significant differences

Graph 10: Population directly affected



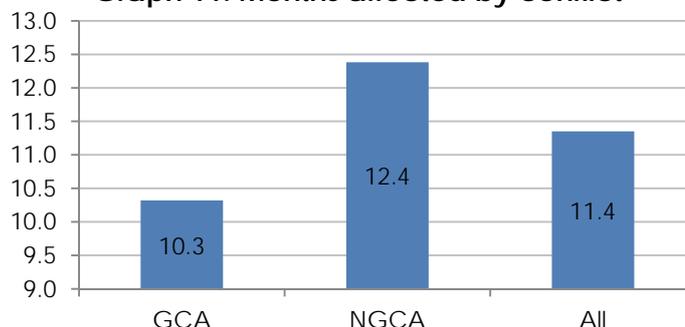
⁶ Average national wage in Ukraine was approximately UAH 4 400 in June 2015, equaling USD 200 using the UN exchange rate of 22 UAH/1 USD

per target area persist.

The vast majority of the respondents in the **Non-Government Control** areas have been affected, compared to less than a third in the **Government Control** areas.

Based on the total number of residents and shares of households affected, it can be estimated that a total of 421 422 residents, being part of 115 122 households have been directly affected by the conflict. Whereas 344 925 residents (73 019 households) within the **Non-Government Control** areas.

Graph 11: Months affected by conflict



The duration of the conflict impact is a measure of the severity of the effects. On average the conflict effects lasted little less than one year; however they are longer in the **Non-Government Control** areas compared to the **Government Control** areas, as shown in Graph 11.

At regional level, 36.8 percent of the households in Luhansk have been affected by the conflict for an average duration of 11.1 months, compared to 42.7 percent of the households in Donetsk for an average duration of 12.7 months.

Incomes

Having sufficient monetary resources protects households against certain shocks. Yet, some shocks directly affect the earning power of households, for example, if a household member becomes unemployed, which is a likely outcome in conflict scenarios.

Having income from a stable source may also offer more protection compared to working in informal or otherwise uncertain jobs. Households are considered more vulnerable if they have no stable income sources. The decision as to which income source is stable is conservative, and only formal wage income and old-age pensions are perceived as stable by the population.

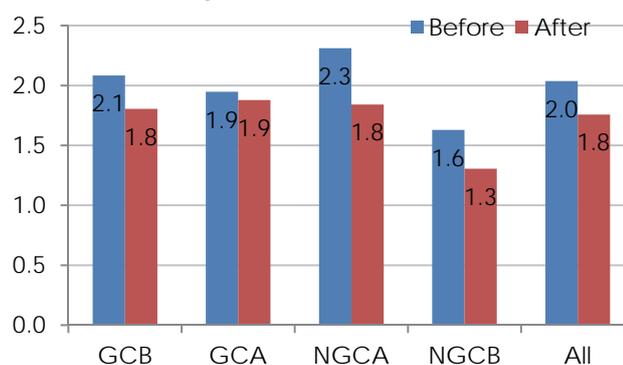
Since Ukraine has a universal pension scheme, all individuals of pension age are classified as pension recipients. As a result, all households with pensioners are by definition less vulnerable.

Incomes from self-employment, agricultural production or property (e.g. land lease) as well as informal transfers (remittances, transfers from relatives and friends) are considered as less reliable.

Bearing in mind the relativity of the perceptions, the quantitative measures of the financial resources are complemented with measures of quality.

As households are more complex economic units than individuals, information on the number of household “cash earners” before the conflict and at present is provided in Graph 12.

Graph 12: Cash earners



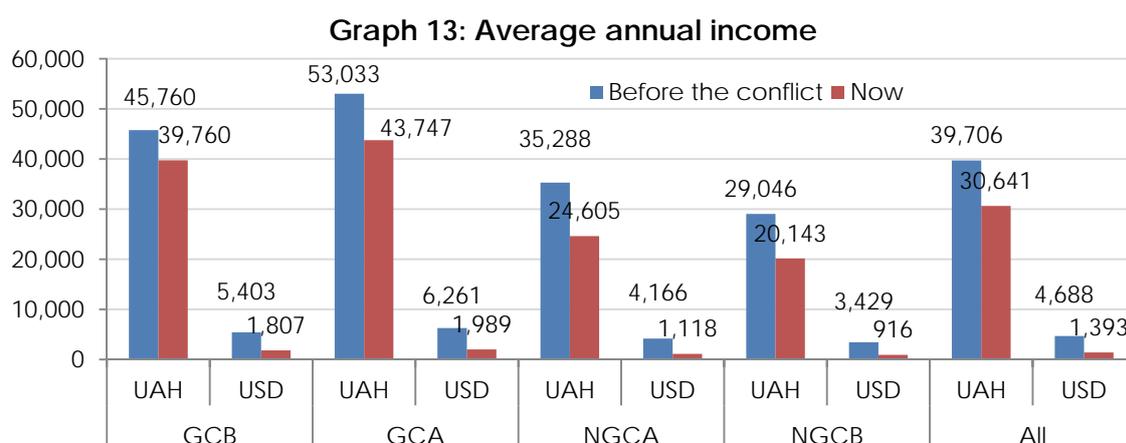
The results indicate average decrease of approximately 10 percent in the number of cash earners on average; and more

substantial decreases (19-22 percent) in the **Non-Government Control** areas compared to the **Government Control** areas (14-19 percent).

The feedback on the number of income sources indicates that only one household had no income prior to the conflict. At present there is a slight increase of 1 percent in the overall number of households without any incomes.

At regional level and in line with the more industrial economy, Donetsk has slightly more income sources compared to the more agriculturally oriented Luhansk, as well as higher incomes by an average of 15 percent.

The average annual incomes of the surveyed population are provided in Graph 13.



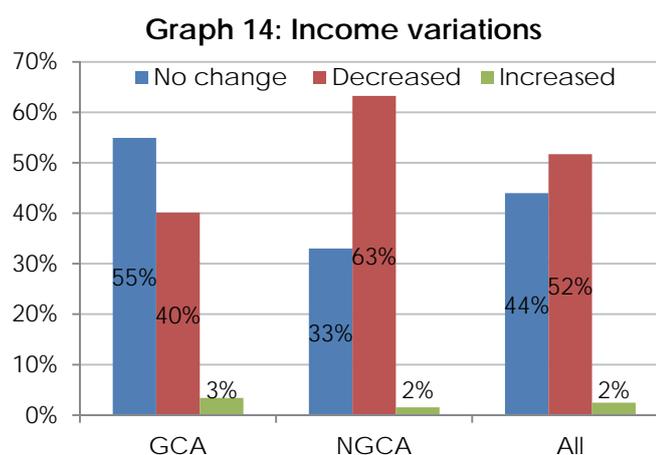
Although incomes in national currency have somewhat reduced, once converted the full effect of the depreciation on account of the conflict is evident. The average monthly income before the conflict is calculated at USD 390⁷, using the exchange historic exchange rate. The current monthly income of the average household in the conflict affected area is calculated at USD 65.4⁸.

Further analysis of the data confirms that 25 percent of the respondents have household incomes higher than a national average wage; therefore the remaining 75 percent of respondents (representing 497 199 persons within 172 272 households) can be considered exposed to monetary poverty.

The lower incomes in the **Non-Government Control** areas compared to the **Government Control** areas have further decreased since the conflict.

The variations in the incomes and in particular the decrease in the household incomes, is further reconfirmed in Graph 14, as more than half of the households have identified with it.

Most evident decrease of incomes is noted in the **Non-Government Control** areas (estimated 53 243 households),



⁷ UN exchanged rate used: 8.49UAH to 1 USD

⁸ UN exchanged rate used: 22UAH to 1 USD

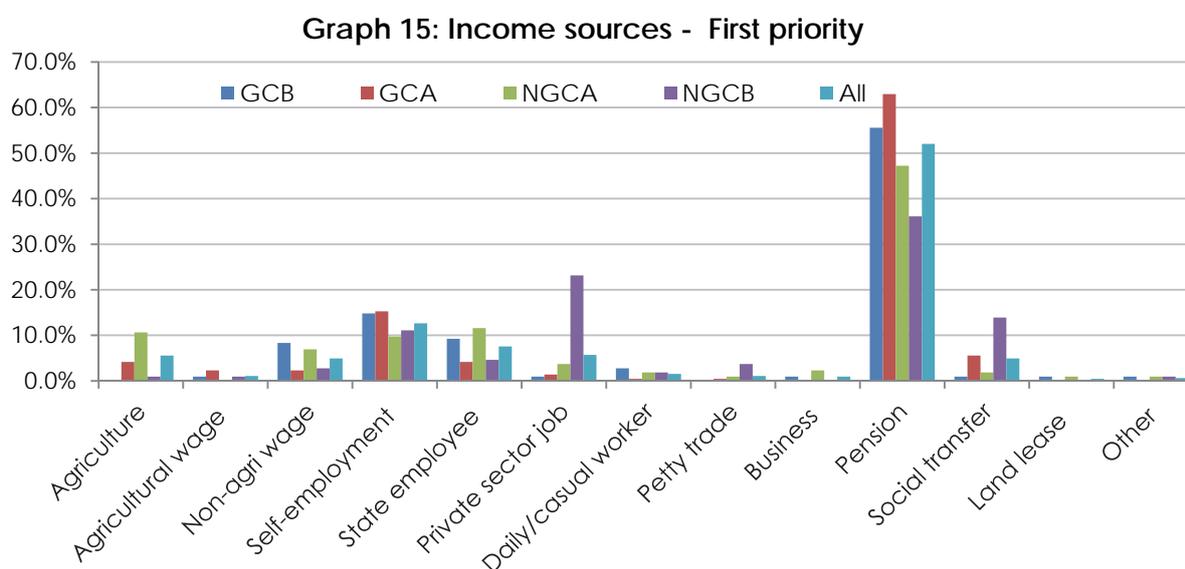
with 23 percent more respondents compared to the **Government Control** areas (estimated 58 073 households). In parallel, more than half of the respondents from the **Government Control** areas noted no decrease in incomes due to the conflict.

The type of income, in parallel to the number of incomes and size of the household, is a significant determinant of monetary poverty.

The likelihood of vulnerability increases with the number of dependents in the household, and with the number of low incomes such as pensions.

The probability of living in poverty is lower for individuals where a larger share of household members contribute incomes from different sources, or if the household has income from regular wage, self-employment or agriculture.

The most important types of household incomes are provided in Graphs 15 and 16, indicating that overall pensions were and still by far are, the most important income sources for the households; followed by self-employment and sales of agricultural produce.

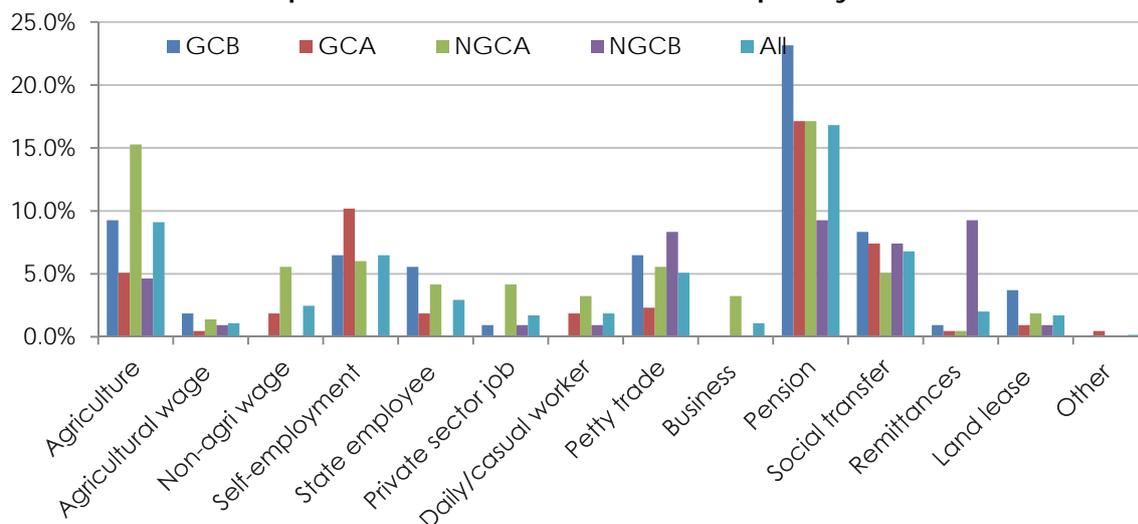


Analysis per target area indicates that:

- Pensions are more prominently important in the **Government Control** areas and somewhat less impact in the **Non-Government Control** areas;
- Social transfers and remittances are more relevant in the **Non-Government Control** areas;
- Incomes from the private sector/small business are more important in the exclusion zone of the **Non-Government Control** areas, in line with the presence of more industrialized economy;
- Self-employment is of high importance in all areas apart from exclusion zone of the **Non-Government Control** areas;
- Agriculture is a relevant income source in all areas and in particular in the exclusion zone of the **Non-Government Control** areas.

At regional level, the incomes from agricultural production in Donetsk are evident in 62 percent more households compared to Luhansk region. On the other hand, incomes from agricultural wages are more than double in Luhansk region, indicating a more commercial agricultural activity. Respondents in Donetsk report more incomes from lease of land compared to the Luhansk, indicating predominance of subsistence oriented agriculture.

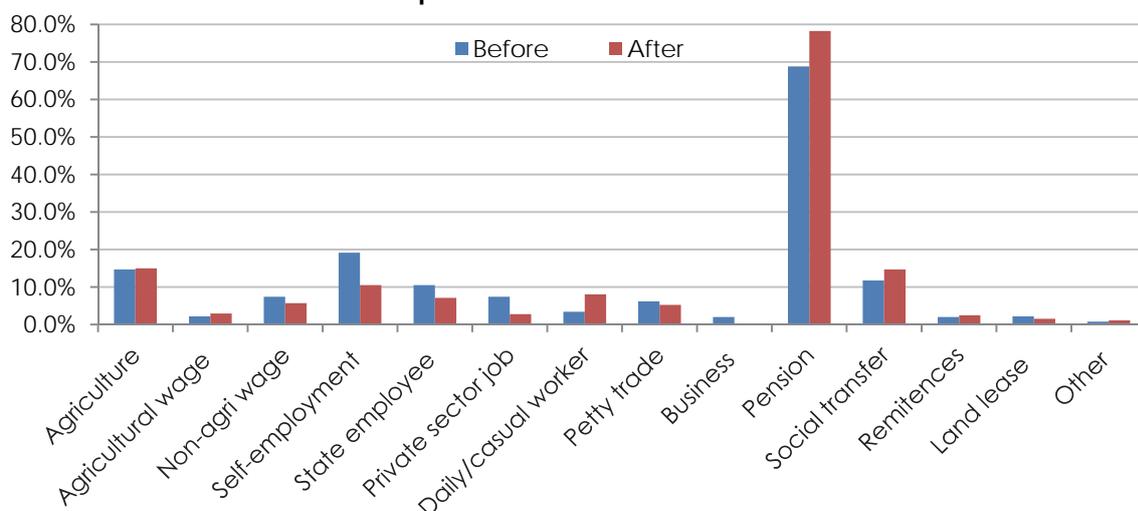
Graph 16: Income sources - Second priority



Private sector employment and social transfers are considerably more important in the Luhansk region.

The results shown in Graph 17 provide comparison of the main pre-conflict and current income sources in the conflict affected areas.

Graph 17: Income sources evaluation



Since the conflict started 9 percent of the interviewed households in the **Government Control** areas (and 13.6 percent in the **Non-Government Control** areas (estimated total of 24 560 households) have changed their main income source, mainly due to lower employment rates in the private and government sector; as well as lower activities in the self-employment sector, in line with the shrinking job market and reduced need for services. In parallel, there is notable increase in importance of state transfers (pensions) and daily/casual work.

The decrease in importance of permanent jobs is noted in 7.6 percent of the households (representing 17 457 households), while importance of daily/casual jobs has increased in 8.8 percent. Agricultural income has remained a stable source of income for the affected population showing only minor fluctuations.

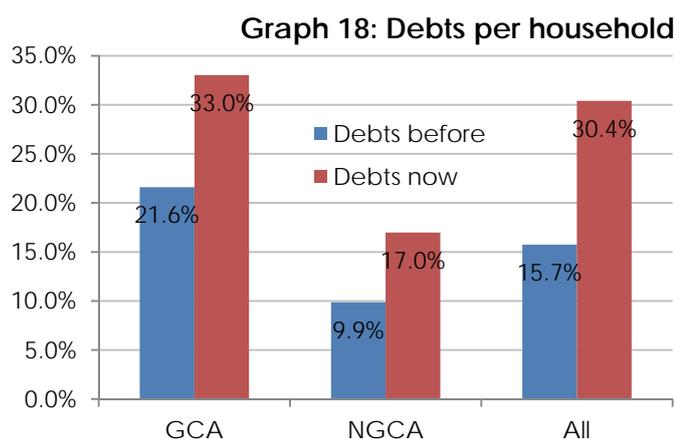
Debts

The presence of formal and/or informal debts may increase the financial vulnerability of the households.

The share of respondents with debts prior to the conflict and now is provided in Graph 18.

A third of the population lives in a household that currently owes money to financial institutions, utility providers or the informal sector (relatives and friends).

The share of households with debts has doubled compared to the pre-conflict situation, with more prominent increase (by 12 percent) in the **Government Control** areas.



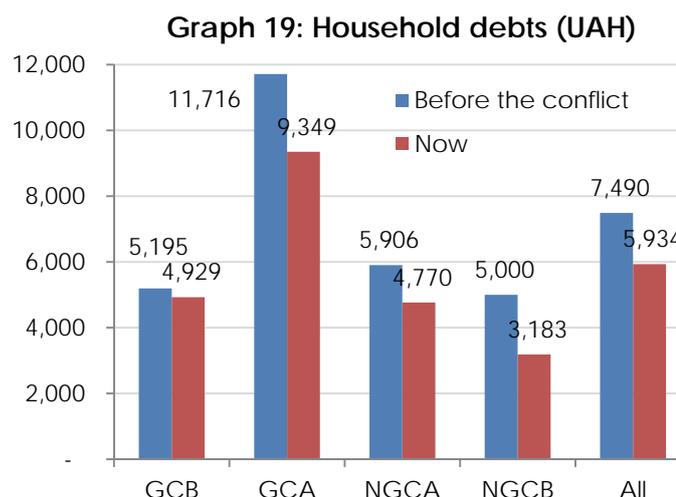
Graph 19 provides more details on the average debts value per area.⁹

The average debts has decreased by 20 percent, whereas, most significant decrease is notable in the exclusion zone of the **Non-Government Control** area.

An estimated 47 910 households from the **Government Control** area have significantly higher debt values compared to 14 367 households in the **Non-Government Control** areas.

At regional level, although the number of indebted households is very similar, the Luhansk residents have substantially higher debt values (13-42 percent depending on the area), compared to the Donetsk region.

On basis of the feedback the overall debt of the households in the target areas is estimated at USD 19 Million.

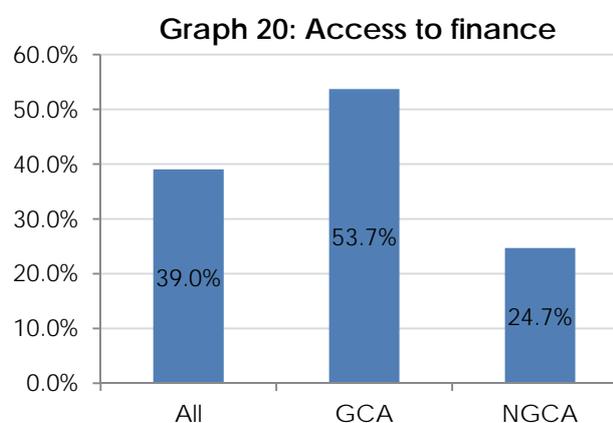


Access to funds

Access to financial markets can help households bridge monetary shortfalls and smooth their consumption over time.

Access to informal credit is also used as an alternative indicator for access to cash, in particular in scenarios where the functioning of the markets has been impacted.

Since households use both formal and informal financial channels, we have



⁹ Calculated on basis of the UN exchange rate from September 2015

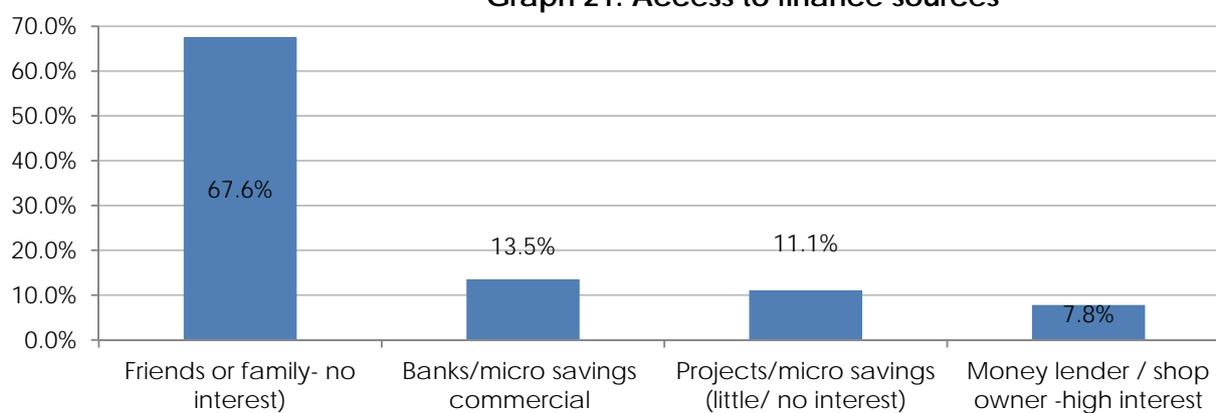
considered both access to financial institutions and the possibility to borrow money from family, relatives and friends.

Graph 20 provides for the share of households with access to finance; indicating that on average, more than a third of the respondents have access to credit/loans.

More than half of the households in the **Government Control** areas are able to borrow funds, compared to quarter in the **Non-Government Control** areas.

A more in depth assessment of the sources of credit is provided in Graph 21, indicating that access to commercial / formal credit sources is limited, and provides credit only to a very small share of the population. The majority of the respondents rely on their social networks and the informal sector when in need of cash.

Graph 21: Access to finance sources



The local banking system seems unwilling to provide credit to the conflict affected area (in particular the agricultural sector), due to lack of collateral, high sector risks and the low profitability of farms. The inaccessibility of formal credits adds yet another obstacle to maintain and increase the agricultural efficiency of the producers.

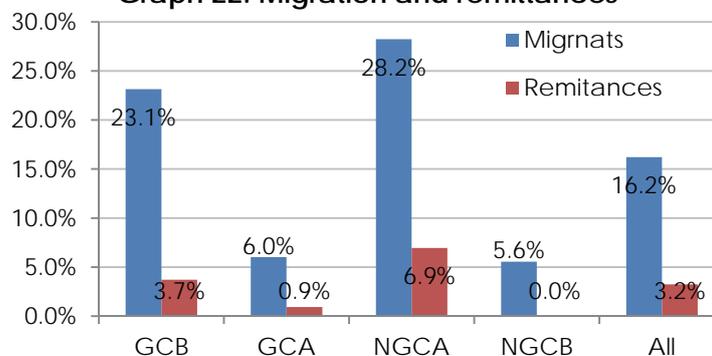
Migration

Although migration contributes to temporary separation and livelihood shock of the household, it can also improve its resilience by protecting the most vulnerable, reducing the consumption needs and increasing incomes.

Households having income from informal transfers (remittances) are more likely to be less exposed to monetary poverty, all else being equal.

Taking in consideration the overall hallmark of migration of the conflict, Graph 22 confirms the considerable level of outmigration from the target areas (estimated 46 620 persons). Whereas, almost a third of the households in the **Non-Government**

Graph 22: Migration and remittances

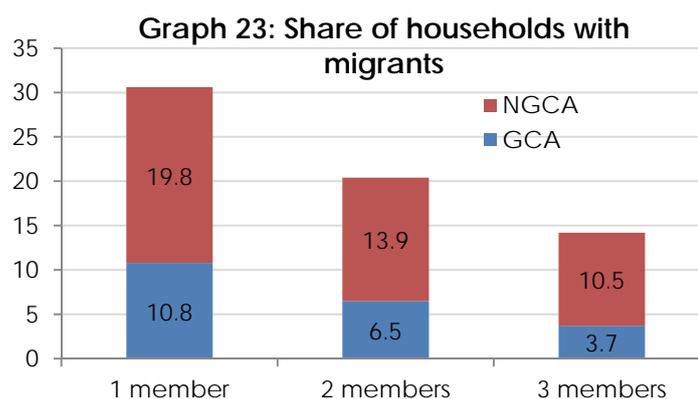


Control Area (15 679 households) and a quarter of the households in the exclusion zone under **Government Control**, have migrants leaving the home since the beginning of the conflict.

Socio-Economic impact and needs assessment – Donbas region - Ukraine

Overall, migration is more common in the **Non-Government Control** areas (twice of the number of households) compared to the **Government Control** areas, as illustrated in Graph 23, and providing yet another indication of relative levels of hardship in the two areas.

The households with migrants have on average 1.59 family members leaving the home, indicating significant livelihood shock, if the average size of households is considered.

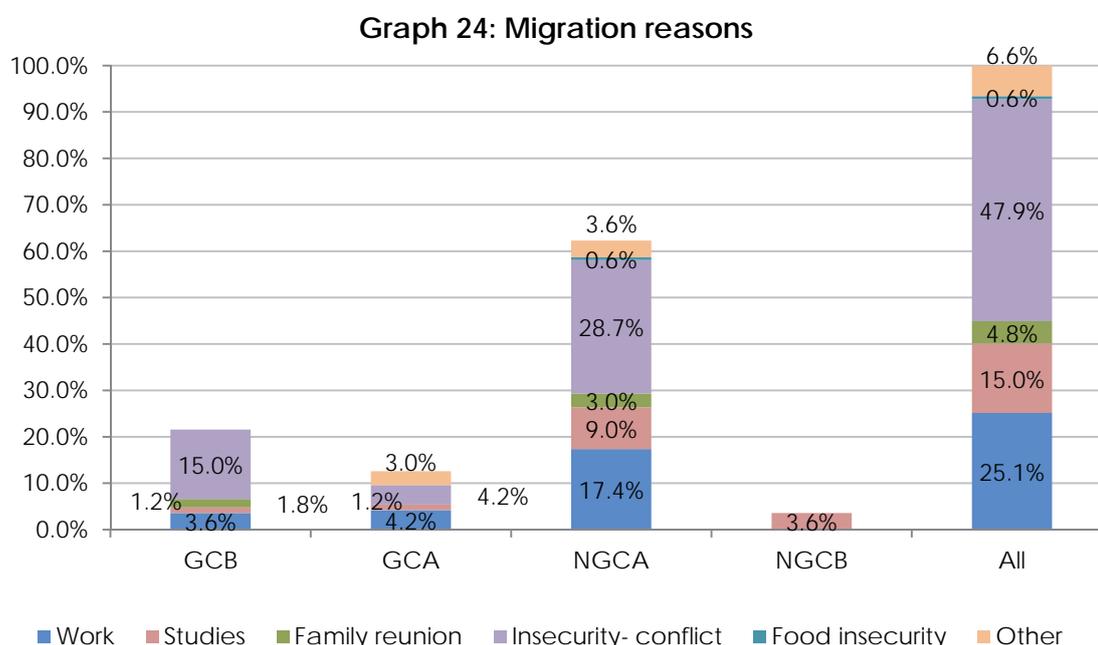


In regional context, Donetsk (18.8 percent) has 27 percent more households with migrant members compared to Luhansk (13.5 percent).

The feedback in Graph 22 indicates that a small share of households has migrant members sending remittances, however they account for 78.4 percent of the migrants who left in search of employment. The value of the remittances sent back by the migrants was calculated at USD 42 per month.¹⁰

At regional level, it is notable that twice as many migrants from Donetsk region are sending back remittances compared to migrants from Luhansk.

The feedback on the reasons for out migration is shown in Graph 24.



Insecurity is the most common reason for migration followed by pursuit for employment, migration for studies and work related migration, further explaining the findings on the average household size and composition.

¹⁰ Based on the UN exchange rate for September 2015 of 22 UAH for 1 USD.

Food security and coping mechanisms

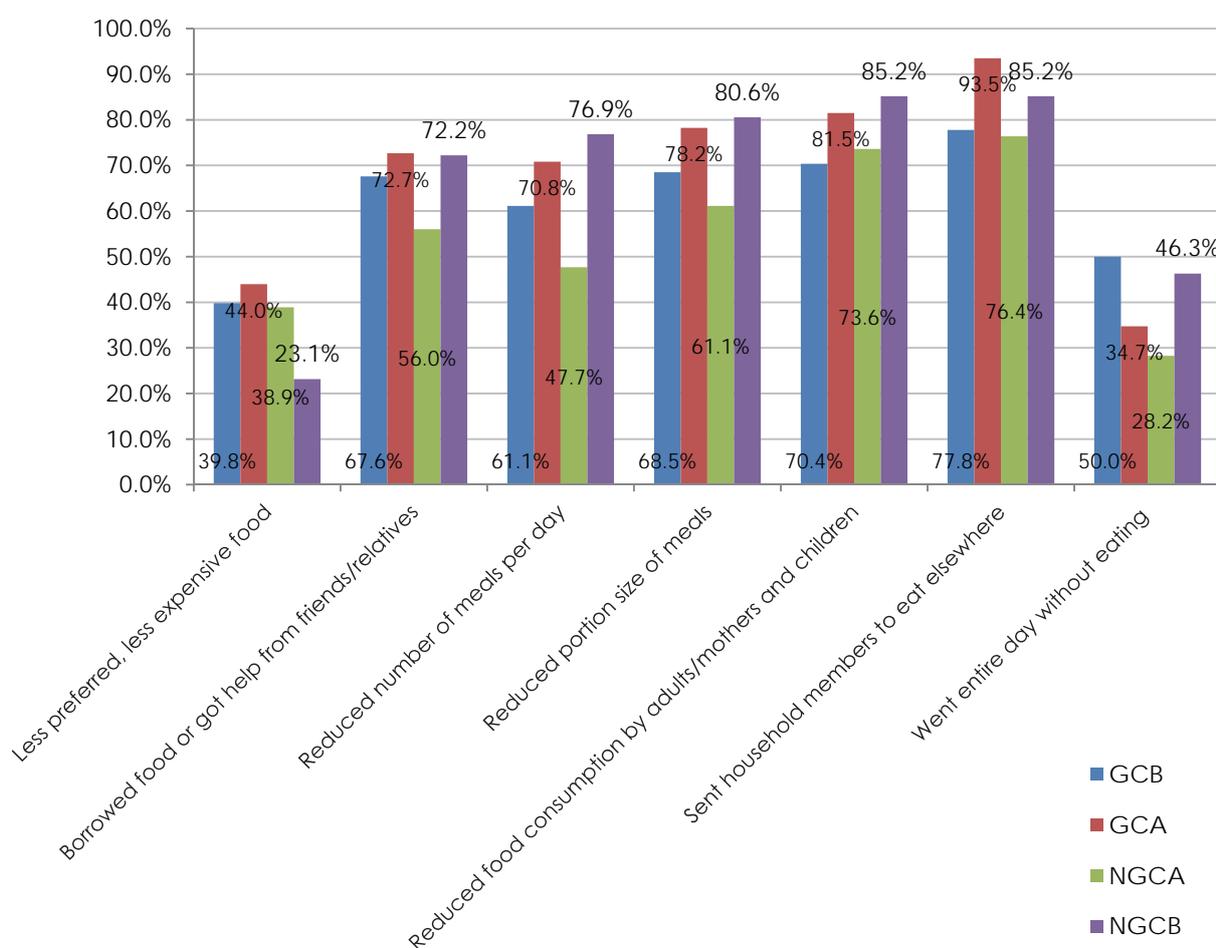
Exposure to shocks contributes to the economic and social vulnerability of households. Analysing the occurrence of shocks provides an indication of the level of shock exposure of different households.

Most of the shocks that affect the target population are stemming from the armed conflict in the region, as well as from the persisting drought during the time of the assessment. They are classified as covariate shocks.

On the other hand idiosyncratic shocks take place at the household level. We distinguish between family related and livelihood shocks. A serious illness, the death of a household member, or becoming unemployed are considered to be family shocks. Livelihood shocks refer to displacement, loss of the house, a lost harvest, or loss of livestock.

The assessment evaluated the food security related impact of the conflict through measuring of the use of coping strategies over the last six months, as a rating indicator for the well-being of the households. The households had to implement at least once one of the different coping mechanisms to qualify. The results are provided in Graph 25.

Graph 25: Food security coping strategies

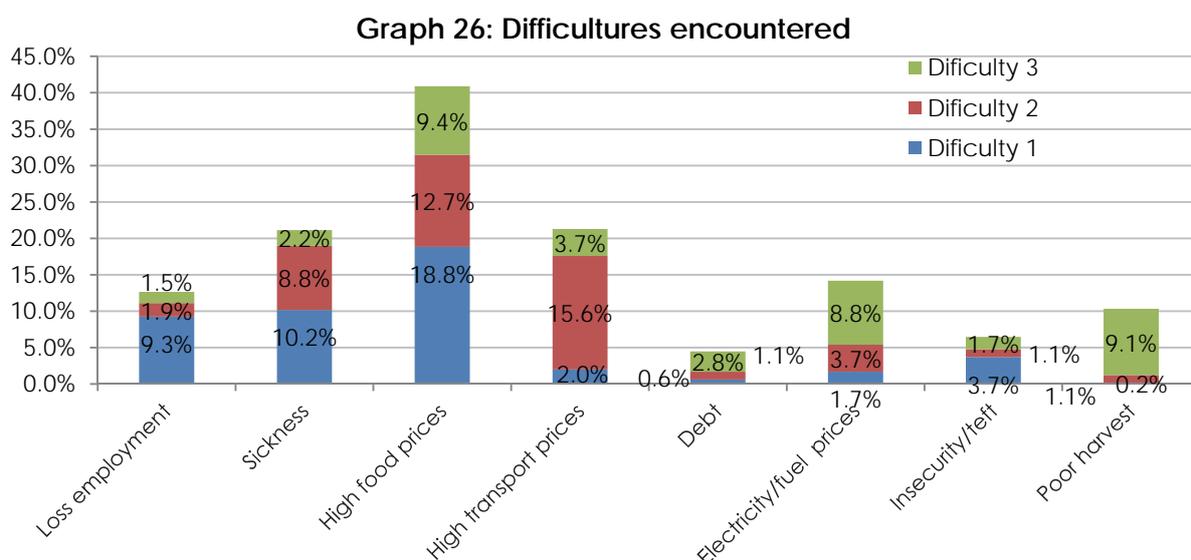


Overall only five households did not use food security coping mechanisms, while those that did, implemented on average 3.57 different mechanisms over the last month.

It is evident that the food security of the targeted population has been affected, impacting both the quantitative and qualitative nutritional intake.

A more detailed review indicates that the **Non-Government Control Area** and the exclusion zone under **Government Control** are somewhat less affected, bringing in context the findings on assistance received and provided in Graphs 54 and 55.

The occurrence of different types of shocks faced over the past twelve months is provided in Graph 26.



One fifth of the surveyed households reported a family shock, while the incidence of livelihood shocks is high.

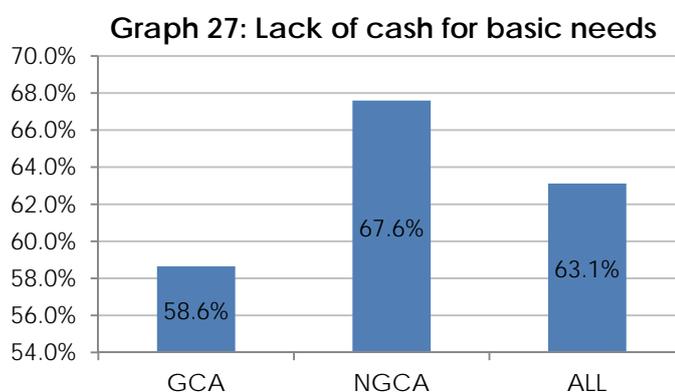
Most of the identified difficulties are related to the overall rising monetary poverty levels. The most prominent difficulties listed by the respondents are 1) high food prices (identified by almost 41 percent of all respondents), followed by 2) high transport/fuel prices and 3) poor physical condition in the elderly residents.

The inability to cope with lack of funds to cover the basic non-food needs (clothes, utilities etc.) in the last 30 days, is illustrated in Graph 27; indicating that due to the prevailing poverty rates, over 60 percent of the respondents (representing 142 208 households) are unable to cover their basic consumption needs.

The residents from the **Non-Government Control** areas have slightly higher rate compared to the remaining surveyed areas.

A shock does not necessarily have a negative impact on the economic situation of the household. The type of the shock, available resources and whether a household took preventive measures determine its actual impact;

this also depends mainly on the level of resilience of the affected households.



Socio-Economic impact and needs assessment – Donbas region - Ukraine

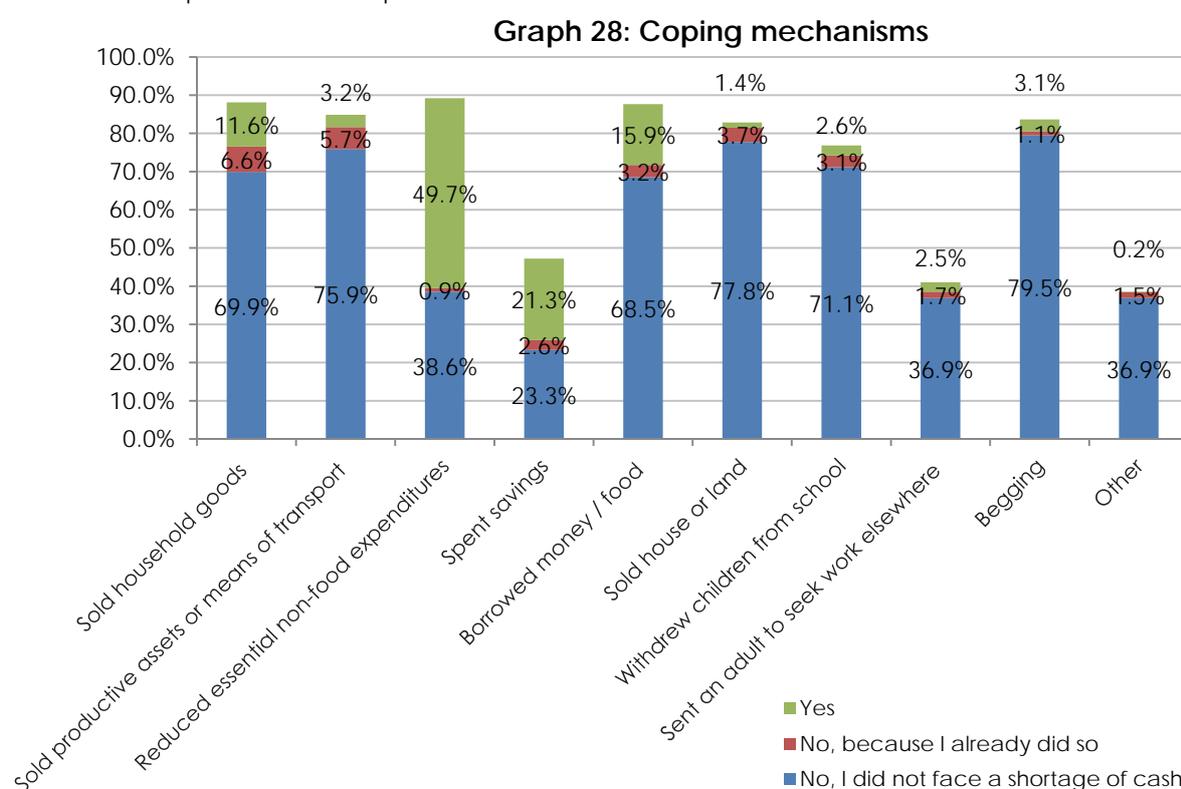
Household resilience is essentially measured in terms of access to resources and the ability to use them. The higher the initial endowment, and the better the exchange opportunities, the more likely a household can protect itself in case of a shock.

Households apply different strategies to cope with resource related shocks:

1) Resource generation can go along different channels, ranging from additional income generation activities, asking families, relatives or friends for assistance apply to public or private support organizations or take up loans.

2) Reducing expenditures is the second prevailing coping strategy, including economizing on the use of goods and services, incurring debts or, in the worst case, referring to measures, which jeopardize the household's future capacity to maintain its well-being through destitution of its productive assets.

The main coping strategies for mitigating of the encountered shocks and difficulties used by the households are presented in Graph 28.



The results indicate that more than half of the surveyed households have used at least one coping strategy. The most frequently used strategies are related to reduction of costs, borrowing, spending of savings and sale of household assets.

The strategies for reduction of household expenditures and costs constitute the overwhelming majority of coping strategies. This includes economizing on the consumption of goods and services, which indicates that households responded to the financial crisis by changing their consumption patterns.

Incurring debts (e.g. not paying utility bills, rent or paying back loans) and sale of assets are used as a coping strategy by a little less than a fifth of the respondents.

More than 10 percent of the respondents (representing 22 970 households) referred to devastating coping measures, such as taking a child out of school, begging, prostitution etc. as an increasing share is unable to reduce other expenses.

Agricultural production

This chapter describes the results of the survey related to agricultural production in the targeted communities. It aims to describe the agricultural activities and to evaluate their contribution to the household wellbeing (food security and incomes), further assessing the impact of the conflict on the rural livelihoods of the respondents and the support needs for mitigation of the negative impacts.

With agricultural production being a mainly resource driven activity, the indicators mostly relate to availability and ownership of physical resources such as land, livestock and durable goods.

Lack of physical resources contributes to the vulnerability of households, as no assets are available to be exchanged or utilized in case of need.

Plant production

Plant production is a key contributor to the food security and to the rural incomes in the target areas, integrally linked to land ownership and availability of land.

Land ownership is an important asset for agricultural households, as it matters whether they own the land they cultivate, or whether they have to lease it. Considering that in Ukraine with the privatization of state land and with the standing moratorium on land sales, most of the rural population was allocated with and still owns land plots.

The ownership of agricultural land for plant production is presented in Graph 29. As provided, more than 95 percent of the targeted households own land.

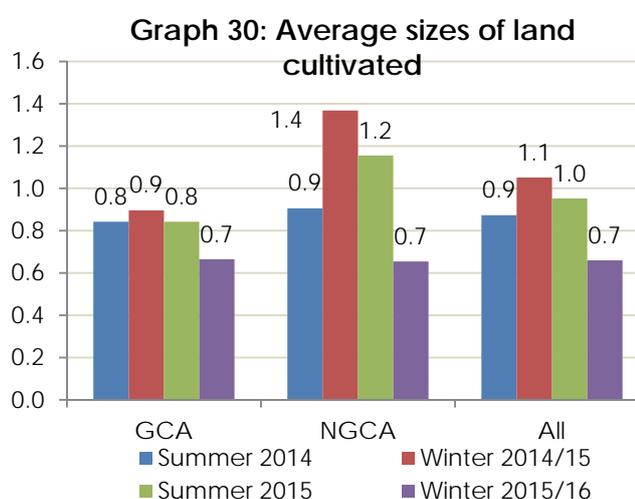
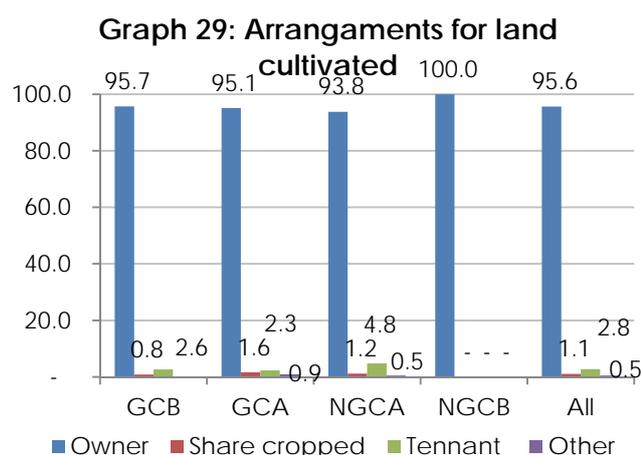
The effect of the conflict on the size of land cultivated is illustrated in Graph 30, by comparing the seasonal land sizes cultivated since the beginning of the conflict (inclusive of the planning for the winter season of 2015/2016).

The areas of land cultivated have generally been decreasing over the past 18 months of the conflict, leading to abandonment of estimated at 53 173 ha.

The provided feedback indicates 40 percent decline in the cultivation of winter crops, with a tendency for further reduction. Sharpest decline (50 percent) in winter cropping is noted in the **Non-Government Control** areas.

Slight increase in the cultivation of summer crops is also notable in the **Non-Government Control** areas.

In terms of number of respondents cultivating plots, it is evident that 91 percent of the respondents cultivated summer crops before the



conflict, and 44 percent cultivated winter crops. Following to the conflict, the share of respondents cultivating summer crops has declined to 88 percent (representing 202 132 households), while the share of respondents cultivating winter crops has risen to 46 percent (representing 105 660 households), indicating that:

- Most of the respondents have remained engaged in agricultural production regardless of the conflict effects; and
- Cropping patterns in the target areas have moved towards production of higher value crops among small farmers.

The reduction of planting combinable crops was also noted in interviews with larger/commercial agricultural producers, which confirmed that due to the insecurity the overall investment per unit of land has decreased, further reducing the quantity and quality of inputs used for plant production.

Feedback on typical crops produced, land sizes used, yields and incomes obtained, and contribution to the households' food security was collected. In order to simplify the feedback, the assessment developed a winter (sown/planted during autumn and harvested in the next year) and summer (sown/planted during spring and summer and harvested in the same year) cropping profile of the households engaged in plant production.

Winter crop profile:

Winter crops mainly include cereals (wheat), on average cultivated on 1.58 ha per household. An average yield of 2 850 kg of grain per farmer is obtained, out of which two thirds of the farmers sell on average 66 percent of the obtained production. The sales of harvest earns on average USD 83 for the average producer. The remaining quantity is stored and supplies the farmers' needs for an average of six months. Oil crops are produced by few households.

Summer crop profile

The respondents produce summer crops on average size of 0.42 ha per household. Potatoes are the most cultivated crop, produced by 52 percent of all farmers who plant summer crops, representing 22 percent of all households.

The average Production of 504 kg is obtained per producer. Approximately 18 percent of the potato producers sell 56 percent of their harvests of potatoes and obtain on average USD 318 per season per household. On average, 399 kg are kept on stock which supplies the households with potatoes for 8.8 months.

The second most important summer crop is vegetables. A mix of vegetables is produced by 31.1 percent of the households on average 0.8 ha per producer, yielding on average 133 kg of produce. Little less than half of the vegetable producers are selling on average 38 percent of their harvest and obtain USD 80 per season per household. Out of the obtained harvest on average 94 kg of produce is kept on stock (mainly preserved), which is sufficient to cover their needs for 7.1 months. Fruits are produced by 6.1 percent of the population (apples, raspberry etc.) on 0.25 ha on average. Some quarter of the production is sold, accounting for USD 33 per producer per season. 139 kg of fruits per household are stored/preserved, meeting their consumption needs for approximately 10.2 months.

Maize is produced by 8 percent of the farmers, on average on 0.2 ha, yielding 331 kg of grain per producer. Almost the entire quantity is stored and used during four months of livestock winterization.

The contribution of plant production to household incomes and food security is presented in Graph 31, by indicating the share of households producing crops for self-consumption (food crops) and for sale (cash crops).

The results confirm that vast majority of the respondents are subsistence farmers who mainly produce crops for their own consumption.

The **Government Control** areas have somewhat higher share of commercial producers compared to the **Non-Government Control** areas.

The length of the food crop production is provided in Graph 32, indicating that on average the farmers need between four and half and five months to obtain a crop.

The cultivation methods used are provided in Graph 33, and indicate that most of the respondents cultivate their land by hand.

The shares of land cultivated by mechanization are in particular small in the **Non-Government Controlled** exclusion zone, indicating mostly backyard agricultural production.

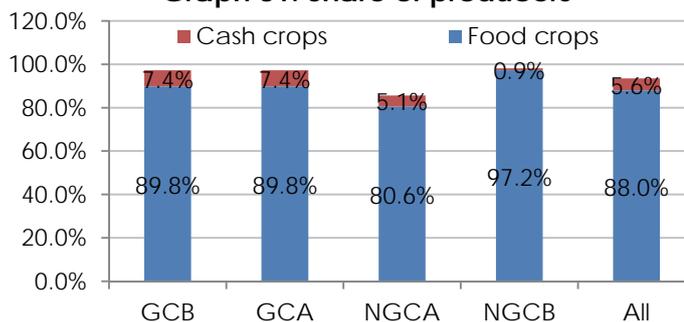
The gender division of the agricultural labour is illustrated in Graph 34, indicating that women participate slightly more in the overall labour, in line with the traditional division per type of production.

The access to irrigation infrastructure and in particular on the access to irrigation water per target area is presented in Graph 35; indicating that the conflict had no significant impact on the access to irrigation water and has caused limited damages to the agricultural infrastructure, mainly in the **Non-Government Control Area**.

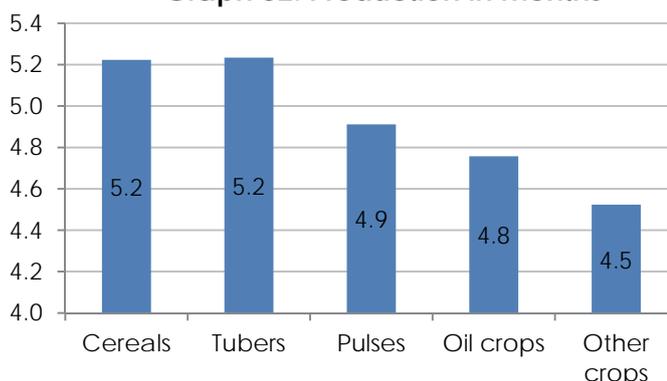
At regional level, it is notable that the respondents in Luhansk have slightly more access to irrigation (up to 10 percent) both before the conflict and now. The damage to the irrigation infrastructure (92 percent) is concentrated in Donetsk region.

The lack of inputs and agricultural equipment limits the potential of farmers to increase their production and sell their

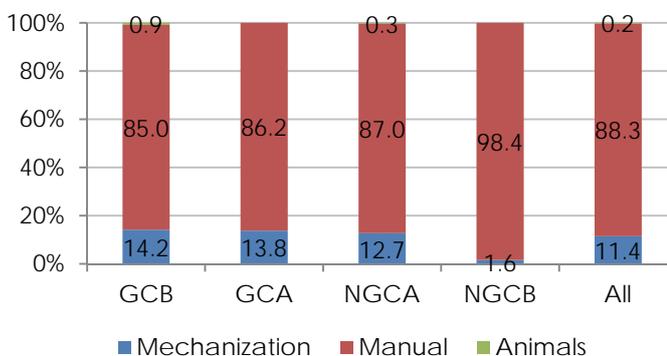
Graph 31: Share of producers



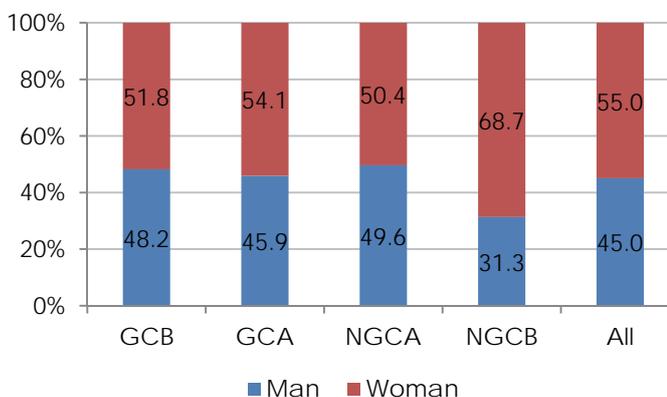
Graph 32: Production in months



Graph 33: Cultivation of land



Graph 34: Agri labour division



produce on local markets. Furthermore, for agricultural households the access to a functioning input and product markets is essential in order to maintain their well-being.

As input supply has been indicated as one of the mayor constraints for the conflict affected population, both in terms of access and costs, the respondents confirmed the sources of seeds and fertilizers for their ongoing production.

The results provided in Graph 36 and 37, indicate that:

- Approximately one third of households meet their needs for fertilizers through their own production (manure), while two thirds rely on the market supply (mineral fertilizers), further indicating the importance of livestock farming in rural areas.
- External support in terms of fertilizers and seeds provided in the target areas is negligible,
- Respondents in the **Non-Government Control** areas rely on their social networks to a significant extent for their supply of fertilizers.
- On average two thirds of respondents buy seeds from markets, while one third produces its own supply. The respondents from the **Non-Government Control** areas rely significantly more on their own production of seeds to meet their needs, indicating limited functioning of the market.

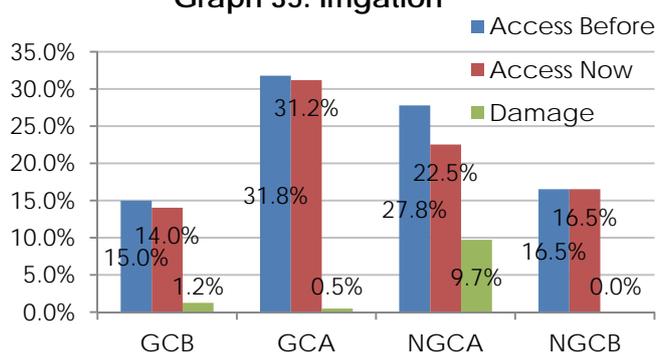
The next question focused on the perceived access to markets by the respondents.

The responses provided in Graph 38 indicate that most of the respondents consider themselves to have overall access to markets; although this perception varies per target area.

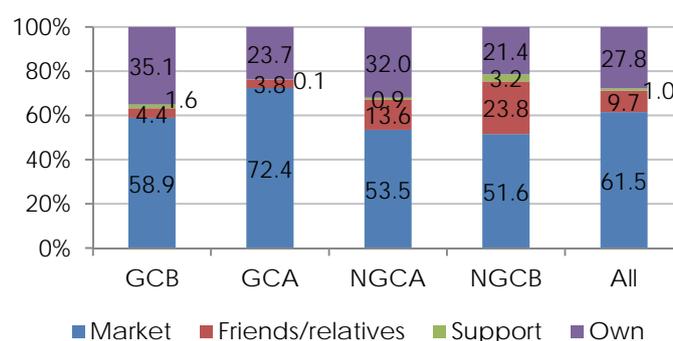
It can be concluded that on average one quarter of the respondents do not have access to agricultural markets for inputs and produce.

The qualification and quantification of the difficulties in accessing the markets is provided in Graph 39.

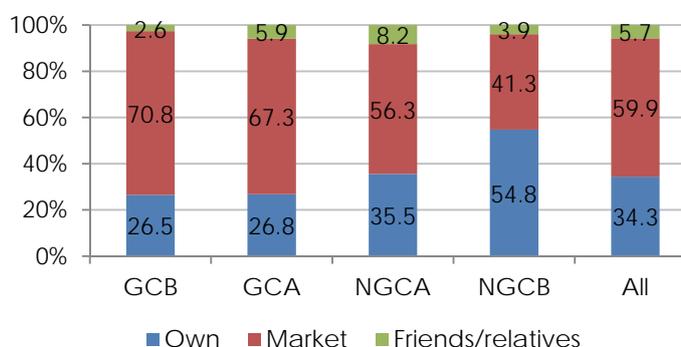
Graph 35: Irrigation



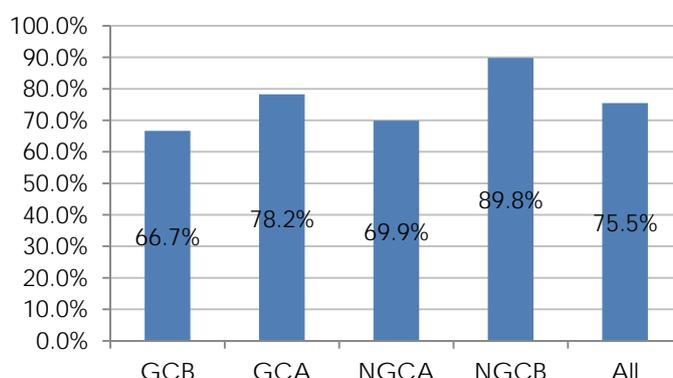
Graph 36: Sources of fertilisers



Graph 37: Sources of seeds



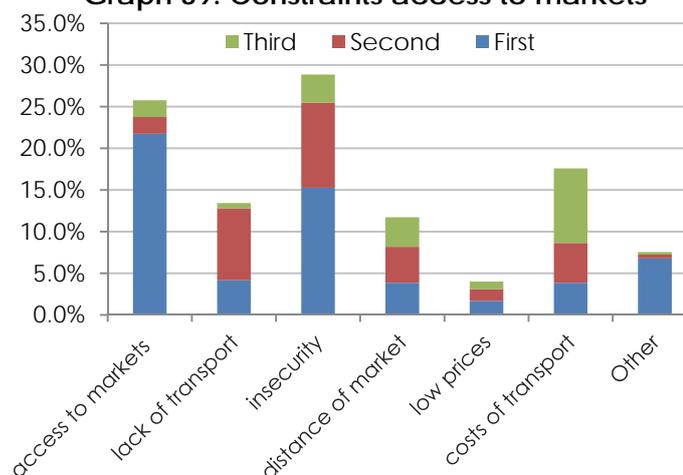
Graph 38: Access to markets



The most severe difficulty perceived by the respondents is the insecurity, followed by the limited physical access to markets, while transport related issues (lack and cost) mark the third and fourth perceived impediment.

Overall 57.4 percent of the households have difficulties to access markets, with a higher share recorded in NGCA (69.1 percent) compared to GCA (45.7 percent). The share of households in the **Non-Government Control** areas quoting insecurity is three times higher for compared with the **Government Control** areas, the share of households quoting lack of transport is twice higher, and the share quoting low demand or prices is one third higher.

Graph 39: Constraints access to markets

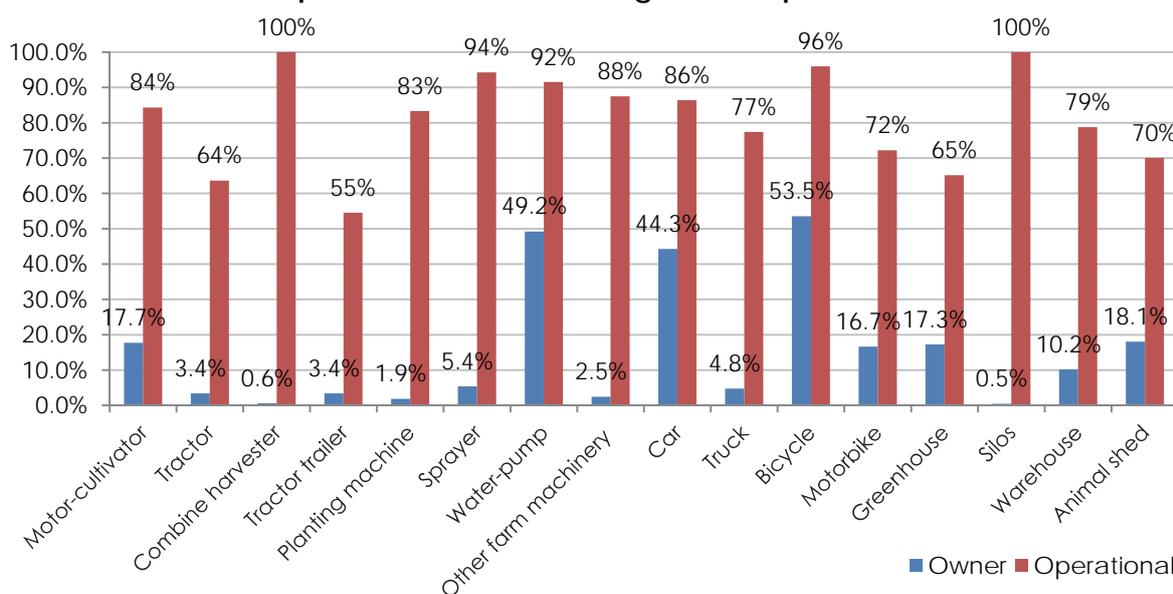


Whether or not a household has a means of transportation serves as resource vulnerability indicator for both agricultural production and access to inputs and product markets. The possession of transport and land cultivation assets is frequently used as wellbeing indicator and an important measure for accessibility of services, especially if they are not available in the community.

Means of transport have been generously defined, including everything from bicycles to cars and tractors.

The overall capacity to engage in agricultural production and to access markets is confirmed through the household ownership of assets, as provided in Graph 40. The ownership of assets per target area is listed in Annex 1, Table 1.

Graph 40: Assets linked to agricultural production



A household should have at least one functional agricultural asset and one functional means of transport in order not to be vulnerable. Based on this definition, slightly more than half of the surveyed population can be considered as vulnerable. Whereas:

- The most common assets owned by the households are bicycles, water-pumps and cars, followed by motor-cultivators, motorbikes, greenhouses and animal sheds and to a lesser extend tractors, farm machinery, silos and warehouses. No significant differences were recorded between the areas, except for water-pumps, sprayers and bicycles for which the shares in the **Government Control** areas are higher.
- A very small share of the respondents owns a cultivator, confirming that most of the land cultivation is done manually.
- A very limited share of the respondents owns a tractor and a tractor trailer, out of which more than one third is not functional. Indicating that most of the respondents depend on service providers for mayor land cultivation operations (ploughing, roto-cultivating) etc. The overall ownership of farm mechanization (harvesters, planter, etc.) is very low and matches the number of operational tractors.
- Approximately half of the respondents own water pumps, indicating that irrigation is often used for production of high value crops during the summer season.
- Less than one fifth of the respondents are involved in greenhouse production, out of which one third is not in use.
- Approximately half of the respondents own functional transportation means enabling them to access their land plots and markets;
- Overall around 80 percent of those assets are functional ranging from 55 percent up to 100 percent), dependent of the type of asset.

Livestock production

Livestock production is a very significant contributor to the food security and to the incomes in rural Ukraine. Animals are mainly produced extensively, with relatively low feed conversion and productivity, and with matching mortality and disease prevalence.

The involvement of the respondents in livestock production is shown in Graph 41, indicating that significantly more than half of the respondents own livestock.

The residents of the **Non-Government Control** areas own slightly more livestock with 68.8 percent compared to the **Government Control** areas with 64.1 percent.

Whereas, the number of animals per owning households is about a third lower in the **Non-Government Control** areas than in the numbers recorded in the **Government Control** areas. The share of households keeping poultry on contrary is slightly higher in the **Non-Government Control** areas.

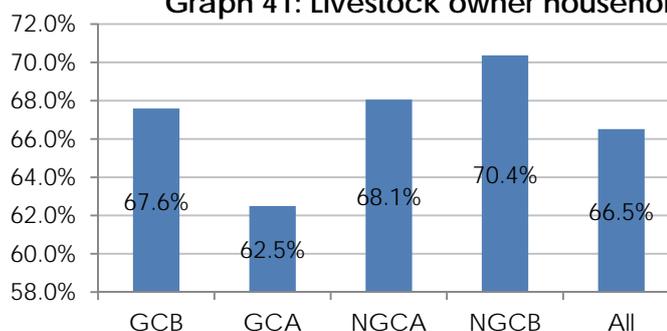
In addition, slightly more (2.3-5.1 percent) residents of the exclusion zones own livestock compared to the remaining areas.

At regional level, very similar shares of households own livestock both in Donetsk and Luhansk regions.

In the household ownership of livestock per the following characteristics were recorded:

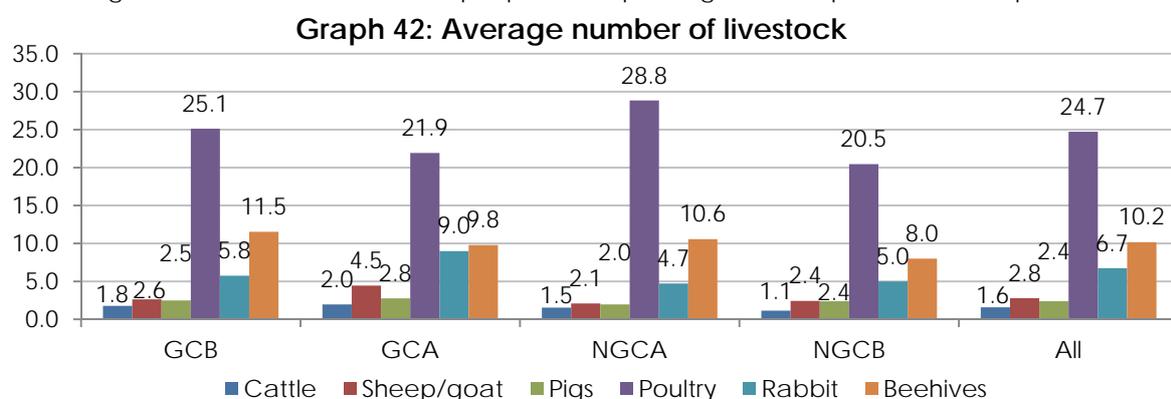
- 30 percent more Luhansk households are engaged in cattle production, compared to Donetsk, although they have approximately 30 percent less animals per producer and market 50 percent less of their animal produce.

Graph 41: Livestock owner households



- More than twice as many residents of Luhansk are involved in rabbit farming compared to Donetsk, owning slightly more animals, however marketing less of their meat.

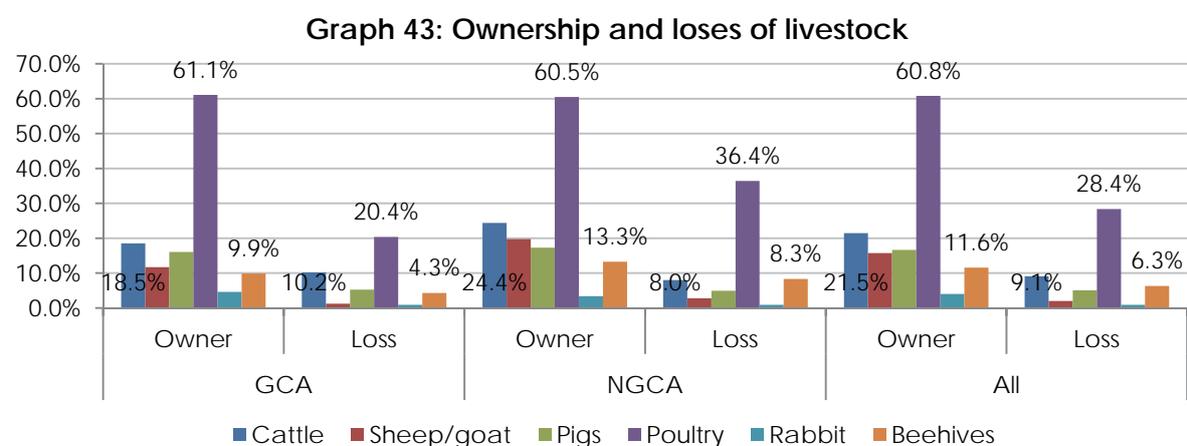
The average number of owned animals per producer per target area is provided in Graph 42.



The results indicate that residents of all target areas in principle own similar number of animals per household, pointing towards mainly subsistence production with occasional sales of surpluses.

The households in the **Non-Government Control** areas are keeping higher value animals and are more likely selling the fast reproducing animals for cash income generation.

The impact of the conflict on the livestock population and shares of affected livestock producers in the last six months is listed in Graph 43.



The comparison of the shares of households owning livestock (estimated 151 207 households) and the shares of households reporting losses (estimated 65 234 households), illustrates the heavy impact on the overall livestock production. The results per target area and per type of animal show slight variations, however the main conclusion that can be synthesized as follows:

- Due to lack of fodder / feed, lack of cash and lack of water, a good share of households have destocked some kind of animals;
- Half of the cattle owning households sold or lost part of their animals, indicating widespread dissemination of the conflict effects and erosion of the household sustainability and resilience;
- The sheep, goat and pig populations seem relatively unaffected by the conflict;
- On average half of the poultry producing households have reported losses, with the **Non-Government Control** areas being most affected and indicating destocking in more than 80 percent of the producers;
- The rabbit production has been affected mostly in the areas further from the exclusion zones, with 30 percent to 40 percent of the producers reporting losses;

- The beehive populations have been most affected; with on average more than 50 percent (35 percent to 70 percent) of the producers reporting reduction in beehive numbers over the last six months.

At regional level, the residents of Donetsk region have lost and sold 20-30 percent more animals than the residents of Luhansk region. The most frequent reasons for animal deaths/losses in declining order of response frequency are:

- 1) Forced slaughter due to the conflict
- 2) Killed in the conflict
- 3) Lack of veterinary services

Most frequent reasons for animals being slaughtered in declining order of response frequency are:

- 1) Lack of fodder/animal feed
- 2) Need for money
- 3) Forced slaughter due to the conflict

The share of livestock owners that do sell livestock produce is provided in Graph 44, while the results of the share of sold production are provided in Graph 45.

The findings indicate that livestock producers sell less than 10 percent of their production, apart from cow's milk where on average they sell slightly less than 20 percent.

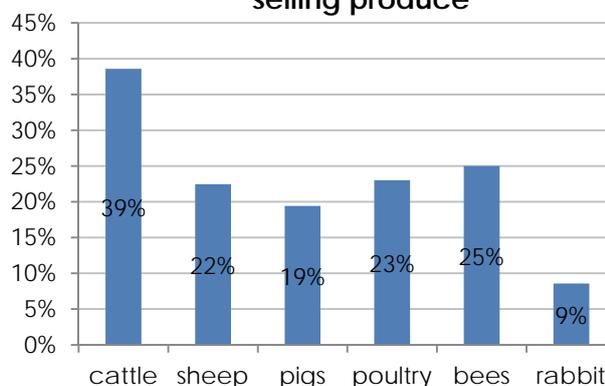
It can be concluded that on average the target population is subsistence production oriented, mainly aiming to meet their household needs.

The results differ slightly per target area, with the respondents from the **Government Control** areas seem more commercially oriented and are selling on average 20 percent to 40 percent of their production.

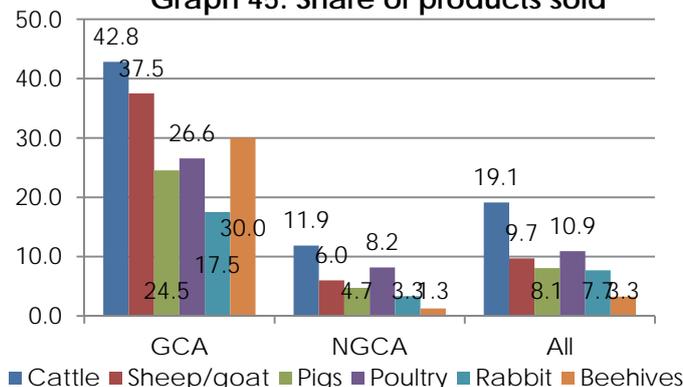
This is likely due to the fact that the households' in the **Government Control** areas are able to sell a higher share of animal products and reinforcing the conclusion that households in the **Non-Government Control** areas rely more on own production, but as consequence generate less income.

Graph 46 provides for the shares of consumption, donating and sales of the most frequently used animal products.

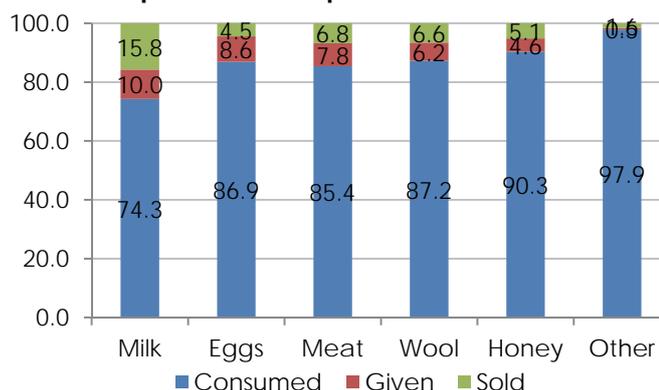
Graph 44: Share of livestock owners selling produce



Graph 45: Share of products sold



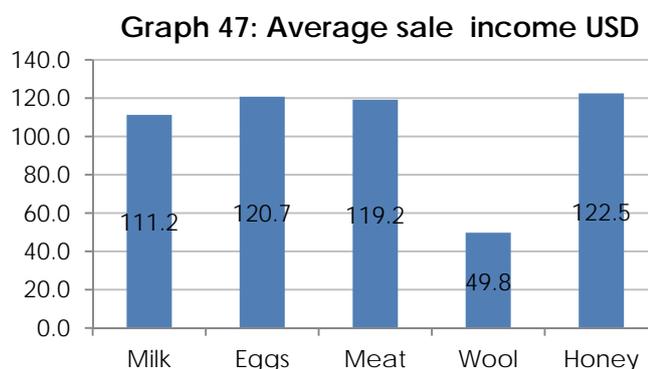
Graph 46: Use of produce last season



Socio-Economic impact and needs assessment – Donbas region - Ukraine

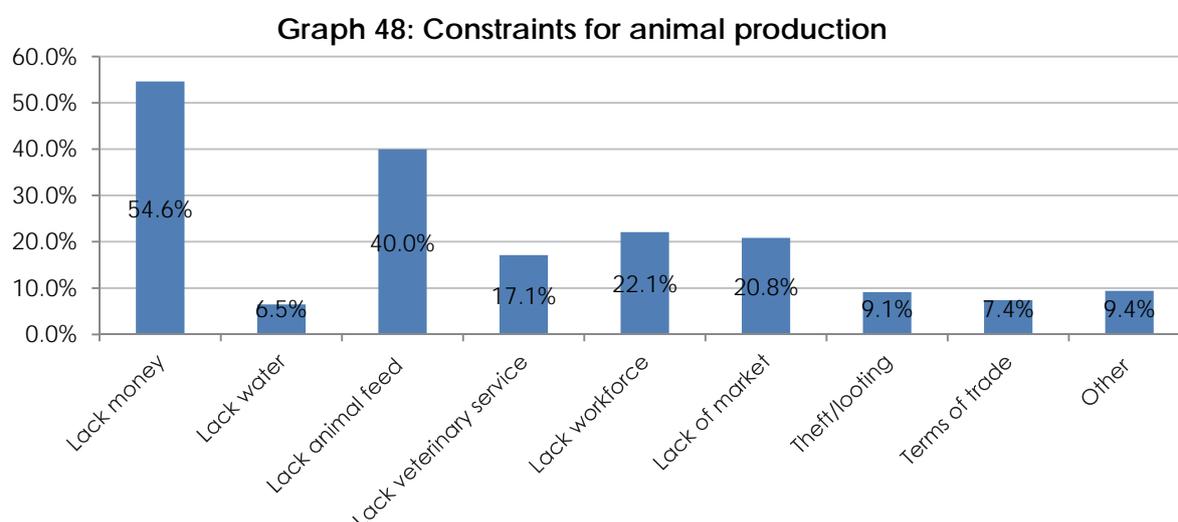
The respondents confirm that at least 70 percent of their produce is consumed within the household and on average between 5 and 10 percent is donated, leaving the sale of produce to account for 5 to 15 percent of the total yield.

The monetary value of the seasonally sold portion of livestock products is provided in Graph 47. The results indicate that on average given the low number of animals owned, and the subsistence type of production, the seasonally sold livestock products amount to little more than an average national salary; which does not significantly impact the income of the average livestock producer household.



The difficulties faced in terms of maintaining and developing of the livestock production are listed in Graph 48, indicating that the lack of cash for turnover costs and investments, and the lack of animal feed, are the main constraints faced by the surveyed producers. Other production constraints such as limited workforce and limited market opportunities are moderately impacting the livestock producers. The constraints for livestock production per target area are provided in Annex 1, Table 2.

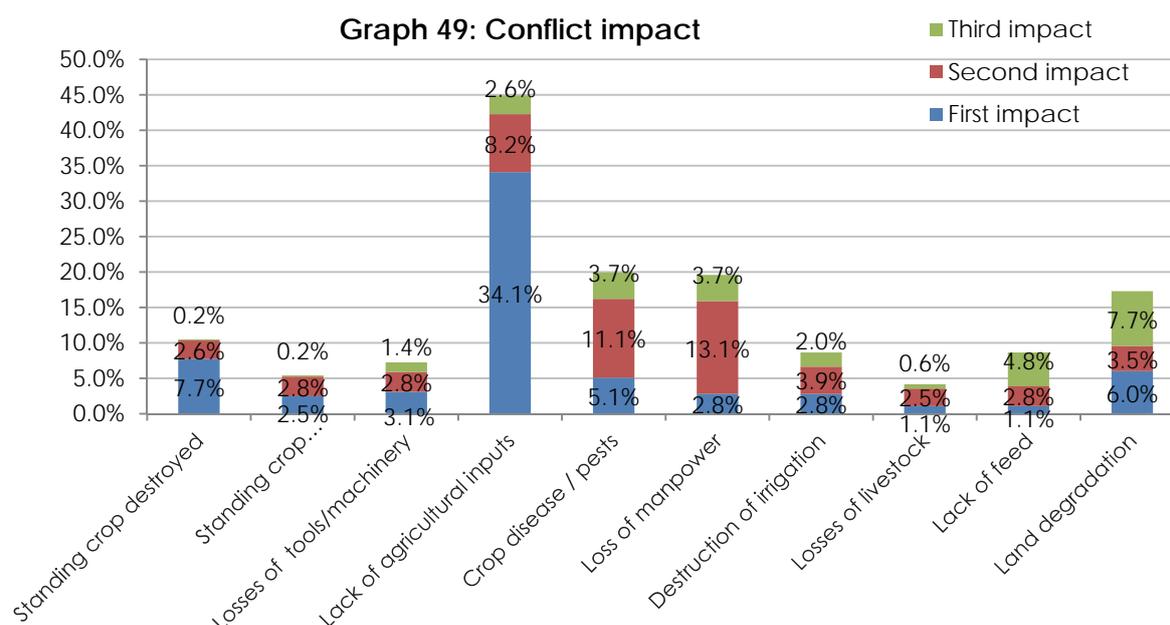
Although, the prevalence and relative importance of different difficulties faced by livestock holding households are broadly similar in **Government Control** areas and **Non-Government Control** areas, a significantly larger share of the population in the **Non-Government Control** areas faces more constraints such as lack of capital, lack of drinking water for animals, lack of labour, lack of animal feed and lack of animal health services.



At regional level, it is notable that apart from the lack of capital, lack of water and the lack of animal feed, which are equally present in both regions, producers in Donetsk face more challenges than producers in Luhansk.

Impact of the conflict on the agricultural production

The impact of the conflict on the livelihoods and the agricultural production is provided in Graph 49, listing the three most prominent impacts since the beginning of the conflict.

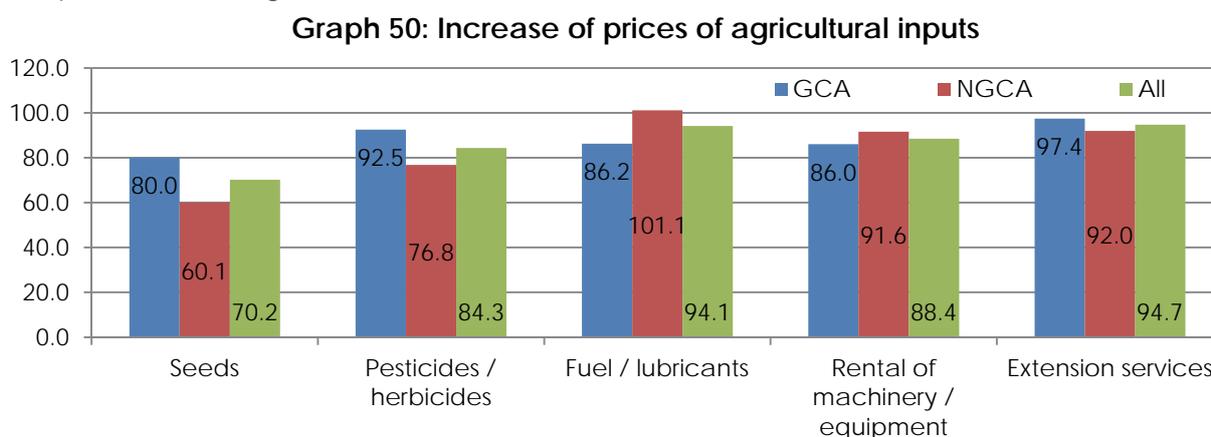


The lack of agricultural inputs is perceived by far as the most important impact, followed by outbreaks of diseases, lack of man power and land degradation (the latter mainly in the **Government Control** areas).

In regional context, apart from the lack of agricultural inputs as most notable impact, land degradation and the loss and abandonment of standing crops, are prominent in Donetsk region, while lack of manpower, outbreaks of pests and diseases and losses of tools and machinery, are more prominent Luhansk.

The conflict impact per target area indicates that the **Non-Government Control** areas have been most impacted in terms of number of households affected, while the **Government Control** areas have been affected by a larger variety of impacts.

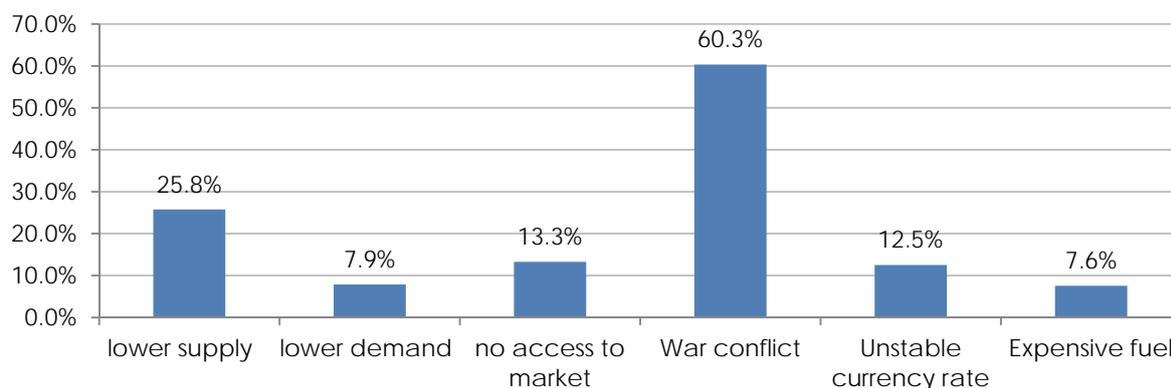
The price variations of agricultural inputs since the beginning of the conflict are illustrated in Graph 50. The findings indicate that prices of agricultural inputs have increased since the start of the conflict by 86.2 percent on average.



The largest increase in prices is notable in the exclusion zone under **Non-Government Control**, although all areas indicate significant increases in agricultural input prices.

The main reasons for the increase in prices as perceived by the respondents, are provided in Graph 51; indicating that most of the respondents consider the conflict and the associated risks and implications to be the main contributor to the increase in prices.

Graph 51: Reason for increase of prices of agricultural inputs



The FAO expert team also discussed the increase of prices with larger/commercial agricultural producers and input suppliers. Prices of all agricultural inputs and services have indeed increased during the conflict period, by 30-40 percent; which considering the discounted procurement and the reimbursed VAT for larger producers, as well as the distribution and retails costs for households, amount to the price increase stipulated by the survey respondents.

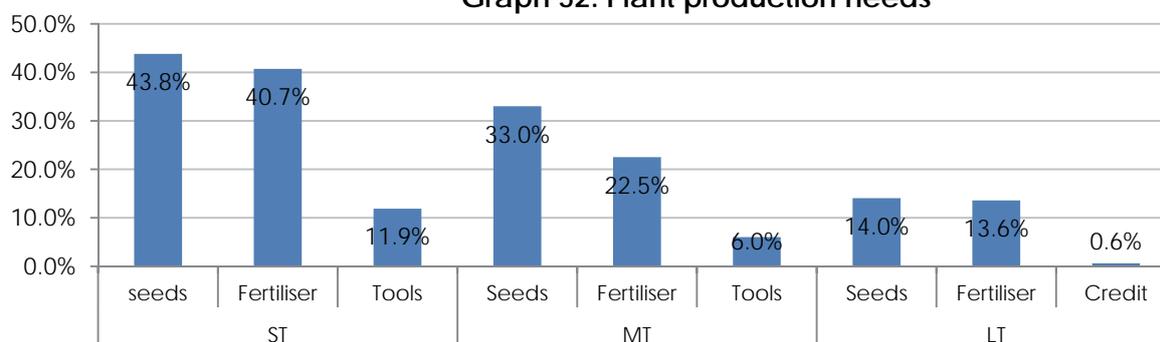
Furthermore, the reasoning of the larger producers for the increase of prices is related to: 1) the security situation which has 2) increased the logistics and distribution costs for the inputs and 3) has severely affected the crediting of the agricultural input suppliers in the conflict affected region, finally resulting in increased prices for the end buyers.

This implies that the farming households will either increase their debt burden in order to cover the production costs or more likely, as already reported above, reduce the area cultivated is resulting in reducing their level of self-sufficiency and incomes generated.

Agricultural production needs

The support needed for maintenance and improvement of the plant production of the respondents in short term (over the next 3 months) medium term (over the next 3-12 months) and long term (above 12 months) are provided in Graph 52.

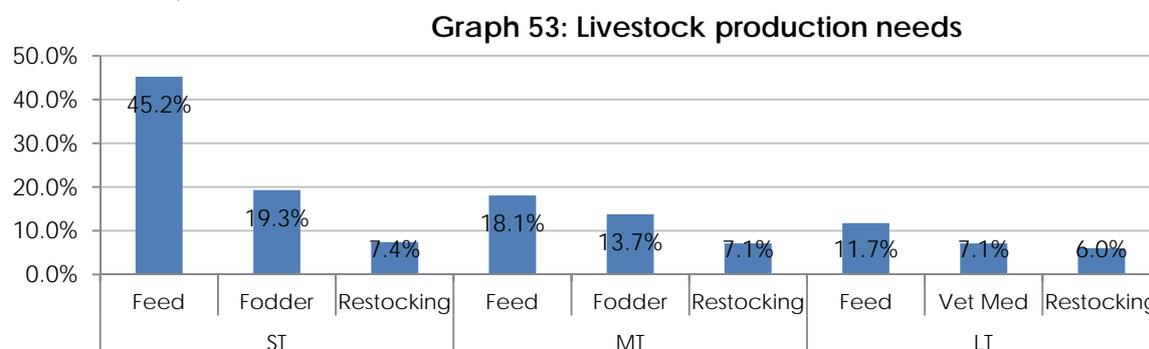
Graph 52: Plant production needs



The most needed support matches and the most prominent constraints identified by the respondents. Majority of the households from each targeted area have confirmed that lack of inputs, both in terms of access and costs, are the main constraints to their production, and have further stated the importance of access to agricultural inputs (seeds, fertilisers, plant protection and tools), to remove limitations to their production. An estimated 100 607 households are in need of seeds and fertilisers, to continue their agricultural production, whereas 59 089 households in the **Government Control** areas and 37 017 in the **Non-Government Control** areas.

The plant production needs per target area are provided in Table 3 in Annex 1.

The support needed for maintaining the livestock activities of the respondents in short term (over the next 3 months) medium term (over the next 3-12 months) and long term (more than 12 months) are provided in Graph 53.



The results indicate that animal feed and fodder are the most needed support for in the target areas, lacking in well over half of the respondents and followed by the need for restocking of lost animals.

An estimated 99 228 households are in need of animal feed to continue their livestock production, whereas 62 719 households in the **Government Control** areas and 36 509 in the **Non-Government Control** areas.

The overall high demand for animal feed might be related – to certain extent – to the time frame of the assessment, as the winterization of the animals is one of the current priorities of the rural population. The livestock needs per target area are provided in Table 4 in Annex 1.

All identified needs stem from the most prominent conflict related constraints (lowered incomes, increased prices of agricultural inputs such as seeds, fertilisers and animal feed and limited access to input and produce markets), affecting sizable shares of the target population.

Overall the surveyed households were similarly impacted by the conflict; however a worse situation is faced by the households in the **Non-Government Control** areas compared to those in the **Government Control** areas. Therefore priority should be provided to the households living in the **Non-Government Control** areas.

Addressing those needs would provide sustainable support to the food security and incomes of the conflict affected population, preserving the possibility for return of the sizable internally displaced population.

Assistance received

Social networks and support

Unlike personal resources, which include variables such as gender, age, religion, education, occupation, income and property, social resources include social networks and social ties that play an important role in the interaction of individuals with social communities.

Social resources determine an individual's access and use of social interactions, necessary for maintaining and promoting self-interest and well-being, for maximizing benefits from friendship, neighbours or relatives, and for ensuring social support in minimizing economic and social risks.

Social resources such as social networks and family relationships, connectedness with people, community and associations, information and communication, represent important dimensions of social

inclusion. The availability of social resources may provide the leverage to overcome shocks and diminish vulnerability.

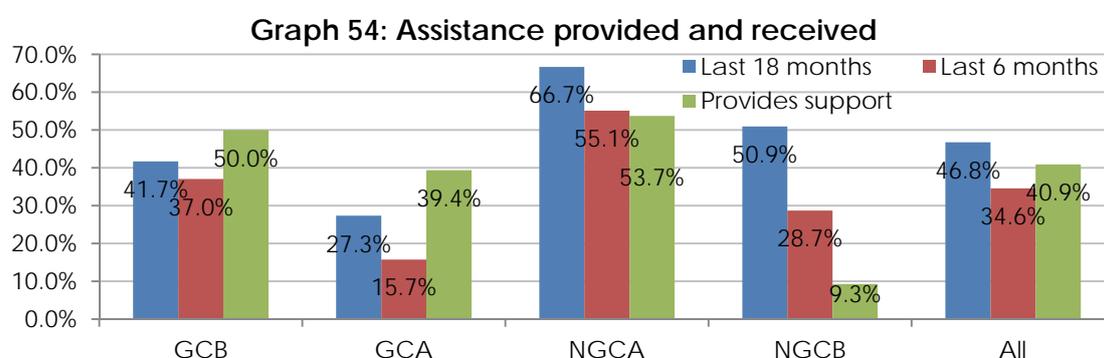
A social network comprises of daily interactions with friends, relatives and the community, in order to share social and economic values and ensure mutual support. Generally, social networks are developed among social groups and individuals with similar social, cultural and economic conditions. Physical neighbourhoods in communities play an essential role for mutual help and the exchange of values.

Within this domain, we already investigated the strength of the social network by asking the respondents to confirm if they are able to borrow cash from friends and relatives (graph 21) and to obtain agricultural inputs from their social contributors (graph 36 and 37). Further the assessment inquired if they are getting/providing food and/or cash assistance from/to friends, family and relatives since the beginning of the conflict.

The results provided in Graph 54 confirm that the respondents in principle have good social networks providing them with assistance in moments of crisis.

Out of the interviewed households, 22.8 percent of the households in the **Government Control** areas (estimated 32 102 households) have received some kind of food or cash support from family members, compared to 46.3 percent of households in the **Non-Government Control** areas (estimated 33 129 households), reflecting of greater need for support.

A major concern in this context is that many (40.9 percent) of those providing assistance to other households are also located in the same conflict affected areas, and are likely experience the same difficulties, limiting their capacity to provide assistance for an extended period of time.



The overall assistance received from relatives has somewhat declined over the last six months. The results can be partially explained with the ongoing harvest season for most fruits and vegetables, reducing the need for assistance, as well as with the income generated from selling production surpluses.

At regional level, the received assistance in Luhansk region is lower by 15-20 percent compared to the Donetsk, further confirming the contribution of the agricultural sector and the stronger social networks associated with agriculturally active households.

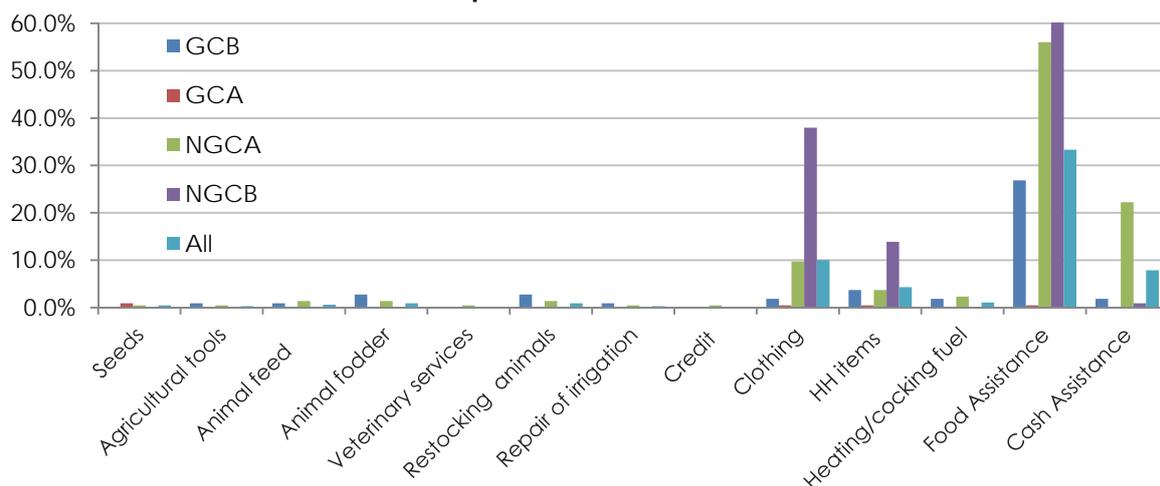
In parallel, the share of households that provide assistance to friends and relatives shows fluctuations depending on the area, as shown in Graph 54.

Other support provided

The humanitarian assistance received from the government and local authorities as well as from non-governmental organizations is presented in Graph 55, indicating a focus on food assistance which has been unevenly distributed throughout the target areas.

More respondents from the **Non-Government Control** areas have received assistance compared to the **Government Control** areas.

Graph 55: Assistance received

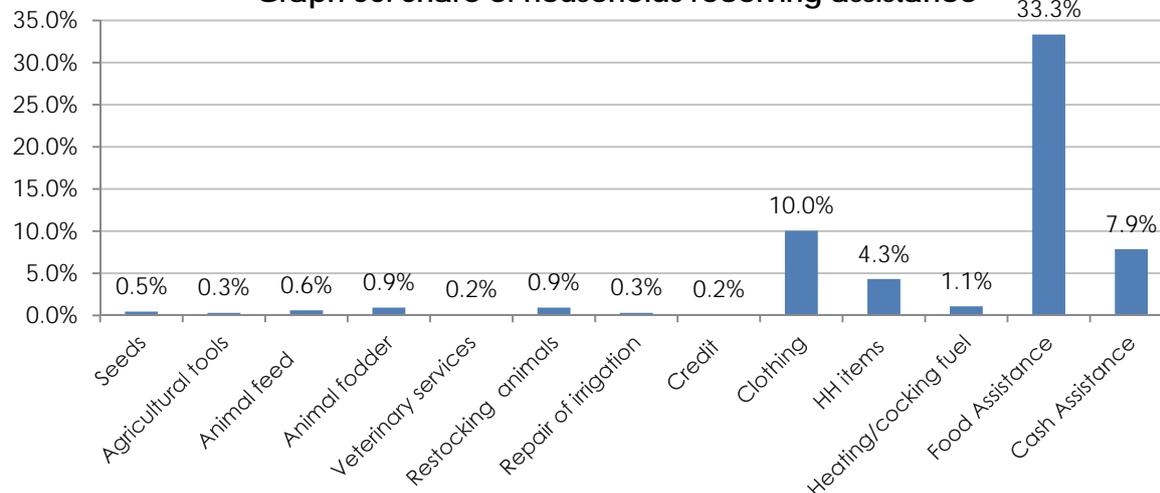


On average, the respondent households that have received assistance, have received 1.58 types of assistance per household, indicating overlapping support at least in terms of types of assistance.

The types of assistance per share of recipients are provided in Graph 56, indicating that apart from food assistance, provided to estimated 88 072 households, the recovery needs of the conflict affected have not been addressed yet, further confirming the need for focusing on more sustainable livelihoods support.

At regional level, in Donetsk (62.5 percent of households) on average 22 percent more households have received assistance compared to Luhansk (48.7 percent). Donetsk households have received substantially more cash and food assistance than households in Luhansk, which have received on average more household items and clothing.

Graph 56: Share of households receiving assistance



Farmers’ organizations

Farmers’ organizations are considered part of extended social networks available to agricultural producers. In particular, taking in consideration that in recent years the Ukrainian agricultural sector has been significantly assisted in establishment of formal farmers’ organizations and informal community based organizations.

Agricultural organizations were frequently established as part of projects activities grouping farmers around a specific crop, commodity or activity. The impact from those activities and the current perception of the conflict affected population on farmers’ organizations is provided below.

The respondents were asked, if they there are any farmer organizations within, or close to their communities. 13.7 percent of the respondent households confirmed the presence of farmers’ organizations, and predominantly in the exclusion zones (22-27 percent of the households).

Some links of the response to the humanitarian assistance being provided since the inception of the crisis can be attributed to the result. However, in principle establishing and disseminating the benefits of farmer cooperation usually takes longer than the conflict period.

The inquiry on membership in farmers’ organizations confirms that on average 3.1 percent of the households have members participating in Farmer organizations, with the **Non-Government Control Area** hosting the highest share of households with members (6.5 percent).

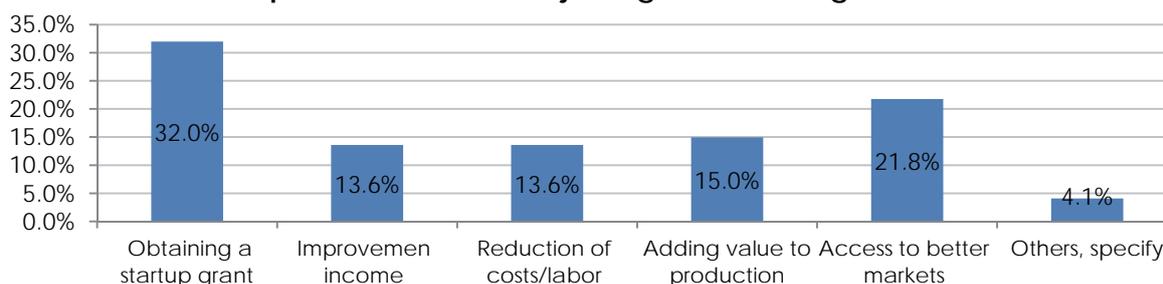
The respondents confirmed that farmers’ organizations active in the communities provide (quite substantially) cultivation services (35 percent of the respondents), to a lesser extent technical advice (28 percent) and in very limited capacity training (2 percent) and joint agricultural input procurement (2.6 percent).

The next question aimed to quantify the benefits from the Farmer Organizations, by asking the respondents to describe the benefits. A total of 5.4 percent of the households benefits (in any form) from the established Farmer Organizations, whereas those in the **Government Control** area tend to benefit more substantially and directly, compared to those in the **Non-Government Control** areas, where the description “marginal benefit” is most prominent.

The results indicate that vast majority of the respondents are not willing to join a Farmer Organization and only 4.5 percent of the respondent households would consider the option. Most enthusiastic are the residents from the exclusion zones (6-8.3 percent of the households), while the residents further away from the conflict line are more sceptic (3.2-0 percent of the households).

Those willing to join farmers’ organizations stated their reasons and expectations from the membership as provided in Graph 59. The majority of the respondents are interested in obtaining a start-up grant, followed by a sizable share of respondents who see Farmer Organizations as means improving access to markets.

Graph 57: Motivation for joining a Farmer Organization



Conclusions

This report presented a comprehensive analysis of the dimensions, patterns and determinants of social and economic vulnerability affecting a total of 662 933 persons, within 229 696 households. It aimed to assess to what extent the conflict affected population is impacted, how vulnerable they are and what their recovery needs are.

Based on household well-being, vulnerability is equally conceptualized in a broader sense and as economic and social vulnerability. Economic vulnerability is the risk of becoming income poor, or the inability to maintain the living standard in the event of a shock. Social vulnerability is defined as the risk of not being able to fully participate in economic, social and civic life in the community.

Economic and social vulnerability are driven by deprivations in resources (financial, physical, human and social), inability to use those resources (access to markets), local characteristics and the probability of shocks occurring.

The exposure to shocks in the target population has been analysed along with the prevalent coping strategies. Based on findings of this assessment the following conclusions on the exposure of shocks and the consequent vulnerabilities can be extrapolated:

- **At least 65 percent of the total population, accounting for 421 422 persons, has been directly affected by the conflict** and suffered from at least one shock within the past year. Whereas, **more than 50 percent of the population has been exposed to prolonged conflict effects**, averaging at almost one year and varying in severity and duration pending on the area. **86.4 percent of households in Non-Government Control areas were affected for duration of 12.5 months**, compared with 29 percent of the households in the **Government Control** areas for duration of 10.2 months.
- Exposure to covariate shocks is very high, while the exposure to idiosyncratic shocks is somewhat lower, depending on the coping capacity of the households. The frequency of family-related shocks (loss of employment) is lower compared to the exposure to livelihood shocks, such as displacement.
- The **exposure to shocks contributed to social and economic vulnerability of the households**. In particular directly affecting food security, incomes, consumption patterns and the overall livelihoods of the surveyed population, in both qualitative and quantitative terms. The analysis of vulnerability indices for the resource and access dimensions, reveals that resource (economic/monetary) vulnerability is more widespread (75 percent) than access vulnerability (50 percent); with at least half of the population vulnerable in both dimensions. Social vulnerability is not jeopardized at present, except for the displaced population.
- **Almost all households used food security coping strategies**, while well over half implemented additional coping strategies for reduction of household expenditures, economizing on use of goods and services and changing consumption patterns. Incurring debts and sale of assets are used as coping strategies by little less than a fifth of the respondents. While more than 10 percent or 22 970 households referred to devastating measures, such as taking a child out of school, begging, prostitution etc., as an increasing share of households is unable to reduce other expenses.
- **Households in the Non-Government Control areas are more affected by the conflict in almost all aspects**, and the severity of the effects on their livelihoods is significantly greater compared to the **Government Control** areas.

The economic profile of the population has changed for the vast majority of the population, as result of the conflict and significant deviations in the financial and occupational flows are notable. Based on findings, the following conclusions can be extrapolated:

- **Household incomes have suffered from reduction in the number of sources and amounts earned**. 75 percent of respondents representing 497 199 persons can be considered as exposed to

monetary poverty due to erosion of their livelihoods. The households in the **Non-Government Control** areas before the conflict had lower income compared to the **Government Control** areas, which have deteriorated further in an imbalanced manner.

- The importance of the “stable” sources of incomes has increased, with state transfers becoming most relied on; in contrary entrepreneurial activity has stagnated and decreased. Agriculture has maintained its contribution to the incomes of a significant share of households.
- **Debts have doubled in number but reduced in value, affecting 62 278 households and indicating that the population is borrowing only to cover the basic cost of living.** The commercial credit system has almost no role, as it fails to enable access to funds for the population.
- **Forced (insecurity) and economic (work) related migration is on the increase** affect up to 25 percent or 32 413 households in the most affected areas. The **Non-Government Control** areas have twice as many migrants as **Government Control** areas.

The food security of the population has been significantly affected, impacting both the quantitative and qualitative nutritional intake. Based on findings, the following conclusions can be extrapolated:

- Almost all households used on average 3.57 different food security coping mechanisms over the last month.
- **Increasing food prices as difficulty outweigh insecurity**, and take the biggest toll on the daily lives of the population, threatening the onset of monetary poverty and consequently food insecurity.
- **Agricultural production and food distributions have prevented severe food insecurity**, although further erosion of the agricultural production will undoubtedly yield negative effects on the food security of the target population.

The agricultural sector has acted as a significant buffer and softened many of the conflict related shocks and impacts. However, there are clear signs of its increasing strain and reducing capacity affecting the productivity and the food security. Based on findings, the following conclusions can be extrapolated on the effects of the conflict on the agricultural production:

- **Most of the population widely engages in agricultural self-subsistence activities on small land plots.** With 95 percent of the households having access to land, 91 percent engaged in plant and 66.4 percent in livestock production, agriculture is a safety net supporting the rural livelihoods. Agricultural mechanization ownership is limited, impacting the productivity and profitability of the agricultural activities. Since the beginning of the conflict the total cultivated areas by the affected households has decreased by some 30 percent or 53 000 hectares.
- **Most of the respondents face challenges in maintaining their agricultural production due to increasing inputs prices and hampered access to markets** for both inputs and produce. Many producers rely on their own seeds and fertilizer for their production, which ultimately erodes their productivity. Overall 57.4 percent of the households have at least one difficulty to access markets, with a higher share recorded in **Non-Government Control** areas (69.1 percent).
- **More than half of the livestock producers, representing 65 243 households have reported destocking**, mainly due to the lack of animal feed, which is a direct result of the increased prices, changes in the cropping patterns, reduced yields and the limited access to markets. Additional losses were caused by the conflict, disease outbreak and lack of veterinary services. This has further affected the food security and incomes of the affected population.
- The **Non-Government Control** areas have been significantly more impacted in terms of agricultural production and agricultural incomes, indicating greater need for support.
- The most urgently needed support consists out of agricultural inputs and animal feed which are unaffordable to the population, in addition to being in short supply or out of reach for almost 200 000 households. Additional needs include restocking live animals, plant protection for control of pests and diseases outbreaks and appropriate agricultural equipment and tools.

Unsupported the agricultural subsistence sector is expected to further contract, casting doubts on its capacity for provision of support to the livelihoods and food security of the targeted population.

Up until now support has mainly been funnelled towards the food security of the conflict affected population, meeting some of the immediate needs. Based on the findings, the following conclusions can be extrapolated for the assistance provided to the conflict affected population:

- **The conflict-affected population has relied mainly on their social networks for support in addressing food insecurity.** The shares of beneficiaries providing support to other households (40 percent) confirm the value in maintaining of the household resilience capacity within the rural/agricultural sector.
- **External assistance provided to the households has been mainly focused on food distribution,** supporting much of the population in the **Non-Government Control** areas and less than third of the respondents in the **Government Control** areas. Other areas of livelihoods have received only symbolic support, inclusive of the agricultural sector. A decreasing overall trend in the provision of assistance to the affected population is notable.
- **There is significant and urgent need to support the subsistence production needs of the affected population,** stabilizing the affected agricultural activities. Addressing those needs would provide sustainable support to the food security and incomes, at the same time facilitating the return of the sizable internally displaced population.

Recommendations for recovery

This survey assesses the economic impact of the conflict on the livelihoods of the affected population and – based on feedback from the respondents – it identifies the early recovery needs for sustainable improvement of the food security situation and easing of the rising monetary poverty.

The feedback from the beneficiaries points to the urgent need for improving the availability of and access to agricultural inputs and agricultural markets.

Key Needs: As a result of the conflict, incomes have fallen, and the onset of monetary poverty is an increasing probability. The worsening economy affects access to credit directly limiting different aspects of life and well-being. The feeling of hopelessness sets in, as it is unlikely that the access to credit for small holders will improve and is likely to fluctuate in parallel with the insecurity.

Agricultural production in the rural areas protects the food security by providing safety net for the producers themselves and the population they support. The conflict affects the commerce and logistics of agricultural inputs and their prices all but double, further increasing food prices. The specific primary impact is a very substantial number of rural residents reducing their expenditures to very basic needs and unable to reinvest in next seasons agricultural production.

Over the protracted conflict part of the livestock is lost/destocked, agricultural production adapts and changes the cropping patterns (moves towards extensive production) and loses on productivity, further eroding the sustainability of the rural-agricultural complex as first impact, increasing the food prices and food security as second impact, and further contributing to monetary poverty completing the vicious cycle of poverty.

Objective: Support the productive capacities and help the target groups meet their immediate needs for agricultural/food production through support programs that recover, maintain and improve the level of their production and productivity and add to their income generation capacity. These activities would need to address their most urgent needs and enable more permanent solutions.

Target areas: The economic recovery support for the rural areas should use a geographic focus is on Luhansk and Donetsk oblasts, with a priority given to the NGCA. Given the wider geographical impacts, and the movement and need for resettlement of IDPs the adjacent oblasts of Kharkiv, Zaporizhzhia, and Dnipropetrovsk should also be considered.

Target groups: Supporting the agricultural activities for rural residents and in particular the most vulnerable and affected (youth, women, elderly people) should be a priority as it can help them cope with psychological trauma caused by the conflict and ease pressure on social networks.

The main target groups for support considerations should be 1) the small holder farmers who engage in subsistence production and 2) the commercial smallholders who keep the local market supplied and by doing that defend against further increase of food prices.

The conflict affected population from all surveyed areas has similar recovery needs and problems; however, the volume of the need varies in line with the share of affected population in addition to the fact that the NGCA is worse off compared to the GCA. It must be noted that recovery prospects in the Non-Government Control area are closely linked to the development of the political situation and thus the ability to implement humanitarian / recovery activities.

Bearing in mind the agricultural profiles of the target population, the type of agricultural holdings in question and the constraints identified, interventions targeting the following activity aspects of the agricultural sector are recommended as immediate response to the deteriorating situation:

1. Implement support programmes improving the access to agricultural inputs and animal feed, in order to ensure and increase the levels of agricultural productivity of food crops and animal products on subsistence farms, increasing the self-sufficiency and self-reliance of farmers and contributing to the food security of the population; Additional focus on improving access to turnover capital for small holders through voucher schemes or cash transfers is recommended.

Socio-Economic impact and needs assessment – Donbas region - Ukraine

2. Implement livelihood programs aimed at fostering income-generating agricultural activities of commercial oriented producers of high value crops / animal products (vegetables, fruits, milk, eggs, meat etc.), contributing to increase the market supply and stabilization of food market prices;
3. Support recovery of the livestock herds in the target areas and improve the access to animal protein (milk, meat and eggs) and as vital component in preserving the food security and appropriate nutrition levels of the conflict affected population.

The overall cost for support for immediate assistance to the most affected population is provided in the Table 5 and 6:

Table 5: Value of immediate support needed per household				
Area		GCA	NGCA	Total
Plant production	Households in need	63 590	37 017	100 607
	Value of support needed	USD 5 908 952	USD 3 439 665	USD 9 348 617
	Most vulnerable population	19 077	11 105	30 182
	Value of support needed	USD 1 772 253	USD 1 031 664	USD 2 803 917
	Cost of support per household	USD 92.9		
Livestock production	Households in need	62 719	36 509	99 229
	Value of support needed	USD 6 899 100	USD 4 016 042	USD 10 915 142
	Most vulnerable population	18 816	10 953	29 769
	Value of support needed	USD 2 069 727	USD 1 204 797	USD 3 274 557
	Cost of support per household	USD 110		

Table 6: Value of immediate support needed per person				
Area		GCA	NGCA	Total
Plant production	Persons in need	178 052	103 648	281 700
	Value of support needed	USD 5 908 952	USD 3 439 665	USD 26 176 128
	Most vulnerable population	53 416	31 094	84 510
	Value of support needed	USD 1 772 253	USD 1 031 664	USD 2 803 917
	Cost of support per person	USD 33.18		
Livestock production	Persons in need	175 613	102 225	277 841
	Value of support needed	USD 6 899 100	USD 4 016 042	USD 10 915 142
	Most vulnerable population	52 685	30 668	83 353
	Value of support needed	USD 2 069 727	USD 1 204 797	USD 3 274 557
	Cost of support per person	USD 39.29		

On basis of all above the proposed comprehensive **Agricultural Recovery Plan** for the conflict affected areas is based on:

1. Immediate response to address urgent needs to maintain and restore agricultural productivity and incomes of the affected population, by optimizing opportunities to strengthen livelihoods and coping capacities and reducing future vulnerabilities;
2. Transition from relief to development interventions in the medium-term, using decentralized approaches and strengthening capacities of people and local institutions to absorb, respond and recover to shocks and threats;

Socio-Economic impact and needs assessment – Donbas region - Ukraine

3. Make development interventions in the medium and long terms, which continue to work with communities, building their resilience through development of the productivity and income generation and use of local resources, thus strengthening the local knowledge base and economies.

Agricultural response plan			
Sub-Sector	Short Term 2016	Medium-Term 2016-2018	Long-Term- 2017 onwards
	Recovery	Recovery and rehabilitation	Towards development
Crops	<ul style="list-style-type: none"> • Provision of seeds, fertilizers and plant protection for food crops; • Provision of agricultural tools and small individual mechanization; • in-kind grants for re-establishment of production of vegetables in green-houses • Cash assistance/ vouchers for procurement of agricultural inputs 	<ul style="list-style-type: none"> • Provision of seeds, fertilizers and plant protection for food and cash crops; • Support the establishment of community based seed production / storage schemes • Voucher schemes for access to services for land preparation, harvesting, silage making (for the most vulnerable) • Subsidized credit for more commercial farmers and input credits for subsistence farmers. • Provision of agricultural tools and small individual mechanization; • In-kind grants for re-establishment of production of cash crops (green-houses) • Promotion and support to producers organizations and inter-professional organizations • Vouchers for repair of farm machinery and equipment • Support to post-harvest processing activities adding value to vegetable (pickles) and fruits (jams), especially for elderly and women headed households 	<ul style="list-style-type: none"> • Crop diversification • Climate Change Adaptation • Strengthening Producers organizations • Foster added value in agriculture through processing, improved supply chains, marketing, and sales. • Improved technology for larger farms,
Livestock	<ul style="list-style-type: none"> • Provision of animal feed • Supply inputs for own fodder production • Provision of animal health services and ensure availability of medicaments and vaccines • Provision of start-up kits of poultry and rabbits (animals, animal feed, vaccination, pens, etc.) • Cash assistance/ vouchers for procurement of animal feed 	<ul style="list-style-type: none"> • Restocking support • Implementation of Good Subsidized credit for more commercial farmers and input credits for subsistence farmers. • Promotion and support to the production and storage of high nutritional value feed / silage. • Support to processing and adding value to animal products, especially for elderly and women headed households • Promotion and support to producers organizations and inter-professional organizations • Repair of farm machinery facilities and equipment. 	<ul style="list-style-type: none"> • Strengthening Producers organizations • Foster added value in agriculture through processing, improved supply chains, marketing, and sales. • Improved technology for larger farms,

Annex 1- Additional information per target area

Asset	GCB	GCA	NGCA	NGCB
Motor-cultivator	24.1%	15.7%	25.5%	0.0%
Tractor	5.6%	2.8%	2.3%	4.6%
Combine harvester	1.9%	0.0%	0.9%	0.0%
Tractor trailer	7.4%	2.8%	3.7%	0.0%
Planting machine	3.7%	1.9%	1.9%	0.0%
Sprayer	3.7%	10.2%	3.7%	0.9%
Water-pump	52.8%	58.8%	52.3%	20.4%
Other farm machinery	1.9%	4.6%	1.9%	0.0%
Car	46.3%	40.7%	48.6%	40.7%
Truck	7.4%	4.6%	5.6%	0.9%
Bicycle	50.9%	67.1%	53.2%	29.6%
Motorbike	24.1%	16.7%	15.3%	12.0%
Greenhouse	13.9%	15.3%	20.4%	18.5%
Silos	0.9%	0.5%	0.5%	0.0%
Warehouse	12.0%	13.4%	11.1%	0.0%
Animal shed	18.5%	17.6%	26.4%	1.9%

Constraint	GCB	GCA	NGCA	NGCB
Lack money	47.2%	50.9%	56.9%	64.8%
Lack water	2.8%	1.9%	8.8%	14.8%
Lack animal feed	40.7%	33.3%	48.1%	36.1%
Lack veterinary service	8.3%	19.0%	27.8%	0.9%
Lack workforce	9.3%	13.0%	32.4%	32.4%
Lack of market	11.1%	22.7%	26.9%	14.8%
Theft/looting	13.0%	2.8%	18.1%	0%
Terms of trade	0.9%	1.4%	19.4%	1.9%
Other	9.3%	5.1%	16.2%	4.6%

Timeframe	ST			MT			LT		
	Seeds	Fertiliser	Tools	Seeds	Fertiliser	Tools	Seeds	Fertiliser	Credit
GCB	6.9%	5.2%	1.4%	4.0%	3.4%	0.2%	0.6%	0.6%	0%
GCA	17.9%	16.4%	2.0%	7.4%	5.9%	1.1%	1.4%	1.1%	0%
NGCA	13.7%	13.7%	5.6%	13.7%	6.3%	3.2%	4.9%	5.6%	0.2%
NGCB	5.2%	5.4%	2.9%	7.9%	6.9%	1.5%	7.1%	6.3%	0.3%

Timeframe	ST			MT			LT		
	Feed	Fodder	Restock	Feed	Fodder	Restock	Feed	Vet Med	Restock
GCB	6.9%	5.2%	1.4%	4.0%	3.4%	0.2%	0.6%	0.6%	0%
GCA	17.9%	16.4%	2.0%	7.4%	5.9%	1.1%	1.4%	1.1%	0%
NGCA	13.7%	13.7%	5.6%	13.7%	6.3%	3.2%	4.9%	5.6%	0.2%
NGCB	5.2%	5.4%	2.9%	7.9%	6.9%	1.5%	7.1%	6.3%	0.3%

Annex 2 - Target population

Region	Rayon	Control	Population total	Rural population	Rural population share
Donetsk	Amvrosiivskiy	NGCA	44529	21100	47%
Donetsk	Artemivskiy	NGCA / GCA	61675	31380	51%
Donetsk	Velikonovosilkivskiy	GCA	40080	34124	85%
Donetsk	Volnovaskiy	NGCA / GCA	104060	48672	47%
Donetsk	Volodarskiy	NGCA / GCA	28946	20553	71%
Donetsk	Dobropilskiy	GCA	16153	14243	88%
Donetsk	Konstyantynivkiy	NGCA / GCA	18622	18622	100%
Donetsk	Krasnoarmiyskiy	GCA	31175	23941	77%
Donetsk	Krasnolimanskiy	GCA	21426	10463	49%
Donetsk	Mariinskiy	NGCA / GCA	83206	28004	34%
Donetsk	Novoazovskiy	NGCA / GCA	28207	13911	49%
Donetsk	Olexandrivskiy	GCA	18978	15368	81%
Donetsk	Pershotravnevy	GCA	26938	13401	50%
Donetsk	Slovianskiy	GCA	33518	18918	56%
Donetsk	Starobeshivskiy	NGCA	49882	22968	46%
Donetsk	Telmanivskiy	NGCA	14418	9957	69%
Donetsk	Shakhtarskiy	NGCA	19180	19180	100%
Donetsk	Yasinuvatskiy	NGCA / GCA	27416	19024	69%
Lugansk	Antratsyivskiy	NGCA	30492	13791	45%
Lugansk	Bilovodskiy	GCA	24160	15968	66%
Lugansk	Bilokurakinskiy	GCA	19386	11814	61%
Lugansk	Krasnodonskiy	NGCA	29318	19393	66%
Lugansk	Kreminskiy	GCA	40868	16620	41%
Lugansk	Lutuginiskiy	NGCA	66614	17566	26%
Lugansk	Markivskiy	GCA	15347	9258	60%
Lugansk	Milovskiy	GCA	15415	9504	62%
Lugansk	Novoaydarskiy	NGCA / GCA	42484	21499	51%
Lugansk	Novopskovskiy	GCA	34709	20883	60%
Lugansk	Perevalskiy	NGCA	64411	4034	6%
Lugansk	Popasnyanskiy	NGCA / GCA	79036	9286	12%
Lugansk	Svativskiy	GCA	36311	16213	45%
Lugansk	Sverdlovskiy	NGCA	11776	7788	66%
Lugansk	Slovyanoserbbskiy	NGCA / GCA	49359	13996	28%
Lugansk	Stanichno-Luganskiy	NGCA / GCA	49555	30858	62%
Lugansk	Starobilskiy	GCA	45695	27979	61%
Lugansk	Troitskiy	GCA	20432	12654	62%

Source of data: State Statistics Committee 2015

Annex 3 - Household questionnaire

COMPLETE BEFORE THE INTERVIEW	
Date: __ __ / __ __ / 2015 <i>Month Day</i>	Questionnaire number: __ __ __ __ __ __
Interviewer Name: _____ Supervisor Name: _____	
Area: __ 1 = Borderline 2 = Gov. controlled 3 = Non-Gov. 4 non gov border Controlled Region: __ 1 = Donetsk 2 = Lugansk Rayon: _____ Village: _____	

Consent: Greet the family, ask authorization to enter and thank them for receiving you. Introduce yourself and explain that the purpose of your visit is to collect information on the nutrition and food security situation of the family. Explain that you will also weigh and measure the children who are younger than 5 years of age. Make sure they understand that there will be no economic, financial benefits or any hand-out resulting from this interview; therefore remove any expectation related to local context. Tell them the survey will last for approximately one hour and apologize for the time taken from them. Clarify that all the shared information will not be displayed or made available to anyone. This is voluntary interview and they are free to answer or not; however remind them that this information is very important. Ask if all is clear and whether they have any question before the start of the interview. After that ask if you can begin the interview. **YES** **NO**

SECTION 1 – DEMOGRAPHICS

A household is defined as a group of people who eat daily or at least frequently from the same pot and live in the same compound (or physical location). It is possible that they may live in different structures

1.1	What is the sex of the respondent?	Male = 1	Female = 2	
1.2	Type of respondent: 1= Head of household (HH) 2= Wife / husband 3= Parents of head of HH 4= Daughter / Son only if adult (>18) 5= Relative living in HH	Please indicate the corresponding number below:		
1.3	Who is the decision maker in the household?	Male = 1	Female = 2	Both = 3
1.4	What is the level of education of the household head? 1= Primary 2= Secondary 3= Tertiary 4= University 5= None			
1.5	How many people in total are currently living in the household (without IDPs)?	__		
How many children and adults are currently living in the household?		Male	Female	
0-5 years		__	__	
6-11 years		__	__	
12-17 years		__	__	
18-60 years		__	__	
Above 60		__	__	
1.6	Since how many months this HH have been directly affected by the conflict? (Please indicate n. of months)	__		
1.7	Do you host displaced people in your household? Yes =(1), no =(0)	__		
	How many people in total?	__		

SECTION 2 – INCOME, ASSETS AND LIVELIHOOD SOURCES

		Before the conflict	At present
2.1	How many household members earn an income?	__	__
2.2	What is the most important source of income for this household (according to the list provided below)? 1= Sale of crop production (maize, potatoes, sorghum,) 2= Sale of vegetables or fruits 3= Sale of cash crops (sugar beets, tobacco, etc.) 4= Sale of animals/animal product		

Socio-Economic impact and needs assessment – Donbas region - Ukraine

5= Agricultural wage labour (employed for farm work) 6= Non-agricultural labour (employed as construction, watchman, etc.) 7= Self-employment (carpenter, electrician, brick making, bicycle taxis etc.) 8= Government employee (teacher, health agent, administration) 9= Private company or NGO employee 10= Irregular daily labour, casual worker 11= Sale of handicrafts 12= Petty trade 13= Military 14= Business (larger scale) 15= Pension 16= Benefit from social cash transfer 17= Remittances from migrants (inside or outside the country) 18= Lease payment from land in cash or kind 19= Shareholder related dividends 20 = Other (specify)	_	_
2.3 What is the second most important source of income for this household (according to the list provided above)?	_	_
Peared per year inUAH	UAH	UAH
2.4 Are these two sources of income regular? 1= temporary/casual 2= seasonal 3= stable/permanent	_	_
2.5	Has your household income changed in the past 6 months 1= No change 2= Decreased 3= Increased	
2.6	If increased or decrease can you please indicate the percentage? _ %	
2.7	Before the conflict	
	At present	
	Do you have debts? 0=No 1=Yes	_
	UAH	UAH
2.8	When you are in need, do you receive food or other form of assistance from relatives, neighbors or friends?	
2.9	Have you received such support in the past 6 months?	
2.10	Are you supporting relatives with food or with cash at the moment? 0= No 1= Yes	
2.11	Do you have any family members who have migrated out since the beginning of the conflict?	0= No 1=Yes
		_ If NO go to section 3
2.12	Migrant No. 1	
	Migrant No.2	
2.13	Migrant No.3	
	Migrant No.3	
	When did they leave? (Please, provide the number of months)	_
	Why did they leave? 1= Work 2= Studies 3= Health treatment 4= Family reunion 5= Insecurity/threats due to conflict 6= Food insecurity 7= Others (specify) 99= No 2 nd migrant, or no 3 rd migrant	_
2.14	Do any of the migrants / relatives sending money back on monthly base?	0= No 1= Yes
		_ UAH
SECTION 3 – AGRICULTURE, MARKET, IRRIGATION AND LIVESTOCK		
3.1 What is the type of ownership of the agricultural land you cultivate? Please describe the percentage.		
1.	Owner	_ %
2.	Sharecropped	_ %
3.	Tenant/Leased to somebody	_ %
4.	Other (specify)	_ %
N.B If sharecropper is applicable, what share of the harvest do you usually give to the owner of the land (indicate %)		_ %

3.2 Which areas have you cultivated in the seasons previous the conflict?	Summer season 2013 (Ha)	Winter season 2013/14 (Ha)
3.3 Which areas have you cultivated in the last seasons?	Winter season 2014/15 (Ha)	Summer season 2015 (Ha)
3.4 Did you plant any food crops including fruits and vegetables during last growing seasons (both irrigated and rain fed crops)?	1= Yes 0= No	
_		
If yes. Please indicate the 3 most important cultivated Food Crops specified by season in	A What area of land have under	B How much did you harvest?
	C What proportion of your production	D Which percentage of the harvest did you sell?
	E How much income did you obtained	F How much of these products do you usually BUY for family
	G How much do you have in stock currently	H How long will the stocks last for family

Socio-Economic impact and needs assessment – Donbas region - Ukraine

addition to fruits and vegetable	cultivation (Ha)?		has been lost or damaged during last season		from the sales (UAH)	consumption during the year if not self-sufficient?	(production, purchase gift, food aid, etc.)?	consumption ? Write 0 if less than 1 month
Crop name		Winter - crops						
	__ __	__ __ kg	__ __ %	__ __ %	UAH	__ __ kg	__ __ kg	__ __ mths
	__ __	__ __ kg	__ __ %	__ __ %	UAH	__ __ kg	__ __ kg	__ __ mths
	__ __	__ __ kg	__ __ %	__ __ %	UAH	__ __ kg	__ __ kg	__ __ mths
Vegetables (tomatoes, onions, etc.)	__ __	__ __ kg	__ __ %	__ __ %	UAH	__ __ kg	__ __ kg	__ __ mths
Crop name		Summer - crops						
	__ __	__ __ kg	__ __ %	__ __ %	UAH	__ __ kg	__ __ kg	__ __ mths
	__ __	__ __ kg	__ __ %	__ __ %	UAH	__ __ kg	__ __ kg	__ __ mths
	__ __	__ __ kg	__ __ %	__ __ %	UAH	__ __ kg	__ __ kg	__ __ mths
Vegetables (tomatoes, onions, etc.)	__ __	__ __ kg	__ __ %	__ __ %	UAH	__ __ kg	__ __ kg	__ __ mths
Fruits	__ __	__ __ kg	__ __ %	__ __ %	UAH	__ __ kg	__ __ kg	__ __ mths
Crop name		Forecast winter season 2015/16						
	__ __							
	__ __							
	__ __							
Vegetables (tomatoes, onions, etc.)	__ __							
Fruits	__ __							

3.5 For how long does your food crop production usually last? Write number of months.

	Crop type	Cereals	Tuber	Pulses	Oil-crops	Other (specify)
Months		__ __	__ __	__ __	__ __	__ __

3.6 Did you plant any cash crops including fodder crops during last growing season (both irrigated and rain fed crops)?

1 = Yes
0 = No

__|__

If the household did not cultivate, go to 3.7

Main cash / fodder Crops (please specify the 3 most important) by season	A Do you usually cultivate these crops? 0=No 1=Yes If No, do not ask other questions for these crops	B What area of land have you planted these crops this season (Ha)?	C How much did you harvest? (use conversion tables to estimate harvest in Kgs)	D What proportion of your production has been lost or damaged (due to conflict)?	E What is the total quantity sold?	F How much income did you generate?
Winter season						
	__ __	__ __	__ __	__ __ %	__ __ kg	UAH
	__ __	__ __	__ __	__ __ %	__ __ kg	UAH
	__ __	__ __	__ __	__ __ %	__ __ kg	UAH
Summer season						
	__ __	__ __	__ __	__ __ %	__ __ kg	UAH
	__ __	__ __	__ __	__ __ %	__ __ kg	UAH
	__ __	__ __	__ __	__ __ %	__ __ kg	UAH

3.7 Which have been the main impacts on the agriculture sector since the beginning of the conflict?

N.B. use the list below and insert them in order of importance using the numbered code.

- 1= Standing crop destroyed
- 2= Standing crop abandoned
- 3= Losses of agricultural tools / machinery
- 4= Lack of agricultural inputs (seeds, fertilizers, etc.)
- 5= Crop disease / pests
- 6= Loss of manpower
- 7= Destruction of irrigation system
- 8= Losses of livestock
- 9= Lack of feed / fodder stocks
- 10= Land degradation (presence of ammunition caskets, funnels, etc.)
- 11 = Other (please specify)

First impact	__ __
Second impact	__ __
Third impact	__ __
3.8 Provide the percentages for each of the different sources where you get your seeds for agriculture purpose normally (ENUMERATOR: should add up to 100%)	
1. Own production / stock	__ __ %

Socio-Economic impact and needs assessment – Donbas region - Ukraine

2.	Market			__ %
3.	Friends / relatives			__ %
4.	Assistance (gov., humanitarian actors)			__ %
5.	Other (specify)			__ %
3.9 Provide the percentages for each of the different sources where do you get your fertilizers for agriculture purpose normally ENUMERATOR: should add up to 100%)				
1.	Market			__ %
2.	Friends / relatives			__ %
3.	Assistance (gov., humanitarian actors)			__ %
4.	Own produced fertilizer (manure, compost)			__ %
5.	Other (specify)			__ %
0.	Do not use fertilizers			__
3.10 Who does most of the agriculture related labour in the HH (planting, wedding, harvesting, etc.)? Provide percentage for each type ENUMERATOR: should add up to 100%)				
	Men			__ %
	Women			__ %
3.11 How do you conduct the agriculture work ? Provide percentage for each type ENUMERATOR: should add up to 100%)				
1.	Mechanized			__ %
2.	Manual			__ %
3.	Please specify other (e.g. animal traction)			__ %
3.12 What type of asset do you currently own? Are they functional? 1= Yes 0= No				
	Type of asset	Owning	Functional	
A	Motor-cultivator	__	__	I Car
B	Tractor	__	__	J Truck
C	Combine harvester	__	__	K Bicycle
D	Tractor trailer	__	__	L Motorbike
E	Planting machine	__	__	M Greenhouse
F	Sprayer	__	__	N Silos
G	Water-pump	__	__	O Warehouse
H	Other farm machinery (specify)	__	__	P Animal shed
3.13		Do you have access to the market to sell your products ?		0=No 1=Yes __
3.14		Which are the main constrains to access the market 1= difficulties to access the market 2= lack of transport 3=insecurity 4=distance to the market 5=low prices to sold commodities 6=costs of transport 7=other (specify) N.B. respondent should answer without suggestion		
		First		
		Second		
		Third		
3.15		Have prices changed in the market (over the last 6 months) when buying agricultural inputs ? Provide the estimate percentage of change.		
Type of agricultural inputs		Seeds	Pesticides / herbicides	Fuel / lubricants
Percentage		%	%	%
		%	%	%
3.16		According to you, which are the main reasons for these changes of prices ? 1= higher demand 2= lower supply 3= lower demand 4=higher availability 5=availability of humanitarian assistance 6=subsidies from government 7=difficulties access the market 8=other (specify)		
First				
Second				
Third				
3.17		Did you have access to irrigation water ?		Before the conflict At present

Socio-Economic impact and needs assessment – Donbas region - Ukraine

	0=No 1=Yes	__	__
--	---------------	----	----

3.18	Did the conflict cause damages to your sources of irrigation (channel, wells, tube wells, etc.)?	0=No 1=Yes	__
-------------	---	---------------	----

If yes what was damaged and which type of damages was done?			
What was damaged		What is the damage	
1= Primary channel 2= Secondary channel 3= tertiary channel 4= wells 5= tube wells 6= water-pump 7= water catchment inlet 8= water pound 9= others (specify)		1= Totally destroyed 2= Partially destroyed 3= lack of spare parts 4= lack of fuel / electricity 5= need repair 6= need replacement 7= others (specify)	
First	__	__	__
Second	__	__	__
Third	__	__	__

3.20 What type of agriculture support would you need most to support / enhance your production? Please specify in order of importance using the code below:				
1 = seeds 2 = fertilizer 3= storage facilities 4 = tools 5 = repair of tertiary irrigation canals 6 = repair of secondary irrigation canals 7= access to agricultural services 8 = credit 9 = draught animals 10=repair of tractor 11= repair / replacement farm machinery 12= repair of tube wells/water pump 13 = repair of greenhouses 14 = other (specify)				
Needs	Short term (Over next 3 months)	Medium Term (3 – 9 months)	Long term (Above 9 months)	
1.	__	__	__	First
2.	__	__	__	Second
3.	__	__	__	Third

3.21 Do you own livestock?	No=0 Yes=1 N.B. If no proceed to section 4.		__			
Ask questions column by column about the animals owned	Cattle	Goat/ Sheep	Pigs	Poultry	Rabbits	Beehives
3.22 How many of these animals do you currently own?	__	__	__	__	__	__
3.23 Did you own these animals before conflict? 0=No 1=Yes	__	__	__	__	__	__
3.24 Have you sold any animals during the past 6 months? 0=No 1=Yes	__	__	__	__	__	__
3.25 What was the main reason for selling the animals (reproductive or not)? 1=Old age/sickness/lack of veterinary services 2=Killed by conflict 3= Slaughter due to conflict 4=Lack of water 5=Lack of fodder/animal feed 6=Need for money 7= lack of shelter 8=Cannot afford fodder/feed 9=Other (specify)	__	__	__	__	__	__
3.26 Have some livestock died during the past 6 months? 0=No 1=Yes	__	__	__	__	__	__
3.27 If yes. What was the main reason for this loss? 1=Old age/sickness/lack of veterinary services 2=Killed by conflict 3=Slaughter due to conflict	__	__	__	__	__	__

Socio-Economic impact and needs assessment – Donbas region - Ukraine

4=Lack of water 5=Lack of fodder/animal feed 6=need for money 7= lack of shelter 8= Cannot afford fodder/feed 9=Other (specify)		__				
3.28 What is the percentage of animal products sold in the past 6 months (milk, eggs, Wool, meat, honey, etc.)? Provide percentage	__ %	__ %	__ %	__ %	__ %	__ %

3.29 How have you used your own produced goods over the last month / season, and estimate the income it has generated?	% Consumed at home	% Given away for free / shared	% Sold	If sold, how much income generated in UAH
Milk (month)				
Eggs (month)				
Meat (season)				
Wool (season)				
Honey (season)				
Other (specify)				

3.30 What are the main difficulties with animals rearing? 0=No 1=Yes	
1.	Lack of money
2.	Lack of water
3.	Lack of pasture/animal feed expensive
4.	Lack for shelter of animals
5.	Animal disease/lack veterinary service
6.	Lack workforce to look after the animal
7.	Lack of market to sell animals/products
8.	Theft/looting
9.	Terms of trade
10.	Other constraint (specify)

SECTION 4 – FOOD SOURCES AND CONSUMPTION, COPING STRATEGIES AND SHOCKS

4.1 - During the last 30 days, did your household have to employ one of the following strategies to cope with a lack of money to cover the food needs? READ OUT STRATEGIES	0= yes / 1= no
1. Relied on less preferred, less expensive food	__
2. Borrowed food or relied on help from friends or relatives	__
3. Reduced the number of meals eaten per day	__
4. Reduced portion size of meals	__
5. Reduced quantities of food consumed by adults/mothers and young children	__
6. Sent household members to eat elsewhere (optional)	__
7. Went an entire day without eating (optional)	__
8. Other	__
4.2 - During the past 30 days, did anyone in your household have to engage in any of the following activities because there was not enough money to cover the basic needs? READ OUT ACTIVITIES	1 = No, because I did not face a shortage of cash 2 = No, because I already sold those assets or have engaged in this activity and cannot continue to do it 3= Yes
1. Sold household goods (radio, furniture, refrigerator, television, jewellery etc.)	__
2. Sold productive assets or means of transport (sewing machine, wheelbarrow, bicycle, car, etc.)	__
3. Reduced essential non-food expenditures such as education, health, etc..	__
4. Spent savings	__
5. Borrowed money / food from a formal lender / bank	__
6. Sold house or land	__
7. Withdrew children from school	__
8. Sent an adult household member to seek work elsewhere (regardless of the usual seasonal migration)	__
9. Begging	__
10. Other (theft, prostitution, etc.)	__

4.3 What have been your main difficulties or shocks in the past 12 months? N. B. Do NOT list, leave the household to answer spontaneously, then ask the household to rank the 3 most important	1 st difficulty	2 nd difficulty	3 rd difficulty
1= Loss employment/reduced salary 2= Sickness/health expenditure 3= Death of household member/funerals	__	__	

Socio-Economic impact and needs assessment – Donbas region - Ukraine

4= High food prices 5= High fuel/transportation prices 6= Rent payment 7= Debt 8= Electricity/fuel wood/kerosene 9= Insecurity/theft 11= Poor harvest 12= Floods, heavy rains, landslides 13= Erratic rainfall/dry spells 14= Other shock (specify)			__
4.4	Over the past 6 months, have there been times when you did not have enough money to buy food or cover other essential expenditures (health, cooking fuel, school, etc.)?	0=No 1=Yes	__

SECTION 5 – NEEDS AND ASSISTANCE RECEIVED FROM GOVERNMENT AND NON-GOVERNMENTAL ORGANIZATIONS

5.1 During the last 6 months have you received any cash, food and non-food assistance from government and non-governmental organizations

ASK FOR EACH ITEM		Circle Yes or No	
A.	Seeds	Yes = 1	No = 0
B.	Fertilizers	Yes = 1	No = 0
C.	Pesticides / herbicides	Yes = 1	No = 0
D.	Agricultural tools	Yes = 1	No = 0
E.	Repair tractor / machinery	Yes = 1	No = 0
F.	Fuel / lubricants for agriculture production	Yes = 1	No = 0
G.	Animal feed	Yes = 1	No = 0
H.	Animal fodder	Yes = 1	No = 0
I.	Veterinary services	Yes = 1	No = 0
J.	Restocking of animals	Yes = 1	No = 0
K.	Repair of irrigation structures	Yes = 1	No = 0
L.	Cash grant for petty trade or other small business to generate income	Yes = 1	No = 0
M.	Credit for petty trade or other small business to generate income	Yes = 1	No = 0
N.	Clothing	Yes = 1	No = 0
O.	HH items (pots, dishes, mats, plastic sheeting, etc.)	Yes = 1	No = 0
P.	Heating / cooking fuel	Yes = 1	No = 0
Q.	Food Assistance	Yes = 1	No = 0
R.	Cash Assistance	Yes = 1	No = 0

5.2 What type of agriculture support would you need most to support your agriculture activities? Please specify in order of importance: **Codes: 1 = seeds, 2 = fertilizer, 3= storage facilities, 4 = tools, 5 = repair of tertiary irrigation canals, 6 = repair of secondary irrigation canals, 7= access to agricultural services, 8 = credit, 9 = draught animals, 10=repair of tractor, 11= repair / replacement farm machinery, 12= repair of tube wells/water pump, 13 = repair of greenhouses, 14 = other, specify**

Period needed:		Short term (Over next 3 months)	Medium Term (3 – 12 months)	Long term (Above 12 months)
A	First	__	__	__
B	Second	__	__	__
C	Third	__	__	__
D	Fourth	__	__	__

5.3 What type of livestock support would you need most to support your production? Please specify in order of importance: **Codes: 1 = Concentrated feed, 2 = Straw/green fodder, 3= Mineral / salts, 4 = Animal medicine, 5 = Animal vaccines, 6 = repair of water source, 7= access to veterinary services, 8 = credit, 9 = Restocking, 10= Fodder seeds, 11= repair / replacement livestock specific farm machinery / equipment, 12= repair of fodder store-room / silos, 13 = repair of Animal shelter, 14 = other, specify**

Period needed:		Short term (Over next 3 months)	Medium Term (3 – 12 months)	Long term (Above 12 months)
A	First	__	__	__
B	Second	__	__	__
C	Third	__	__	__
D	Fourth	__	__	__

5.4 Are members of the HH able to borrow funds if needed? Yes = 1 , No = 0

If yes, from who, see codes below: 1st. |__| 2nd. |__| 3rd. |__|

1. From friends or family (without interest)
2. Banks/micro savings commercial credits (with interest)
3. Projects/micro savings (little or no interest)
4. Money lender / shop owners (with high interests)
5. Not able (specify why _____)

Socio-Economic impact and needs assessment – Donbas region - Ukraine

Farmer organizations				
5.5	Are there any Farmer Organizations active in your or neighboring communities: Yes = 1 , No = 0 __ If NO, finish the interview			
5.6	What type of services does the FO/FOs provide for the community/you, Yes = 1 , No = 0			
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px solid black; padding: 5px;"> 1. Training 2. Cultivation 3. Technical advice 4. Procurement of inputs 5. Marketing of produce 6. Adding value to produce – processing 7. None they are only producing and selling 8. Other (specify: _____) </td> <td style="width: 5%; border-right: 1px solid black; text-align: center; padding: 5px;"> __ __ </td> <td style="width: 45%; padding: 5px;"></td> </tr> </table>	1. Training 2. Cultivation 3. Technical advice 4. Procurement of inputs 5. Marketing of produce 6. Adding value to produce – processing 7. None they are only producing and selling 8. Other (specify: _____)	__ __	
1. Training 2. Cultivation 3. Technical advice 4. Procurement of inputs 5. Marketing of produce 6. Adding value to produce – processing 7. None they are only producing and selling 8. Other (specify: _____)	__ __			
5.7	Are you or others from the HH a member of any FOs? Yes = 1 , No = 0 __ If NO why (specify: _____)			
	<p>Do you benefit in any way from the FOs</p> <p>1) No 2) Marginally 3) Somewhat 4) Yes</p> <p>Other (specify: _____)</p>			
5.8	Are you willing to join any FOs? Yes = 1 , No = 0 __ 			
	<p>If yes, what would be your main motivation? (circle a number) Multiple choices possible</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px solid black; padding: 5px;"> A) Obtaining a startup grant B) Improvement of your income C) Reduction of your production costs/labor D) Adding value to your production E) Access to better markets F) Others, specify: _____ </td> <td style="width: 5%; border-right: 1px solid black; text-align: center; padding: 5px;"> __ __ __ __ __ __ </td> <td style="width: 45%; padding: 5px;"></td> </tr> </table>	A) Obtaining a startup grant B) Improvement of your income C) Reduction of your production costs/labor D) Adding value to your production E) Access to better markets F) Others, specify: _____	__ __ __ __ __ __	
A) Obtaining a startup grant B) Improvement of your income C) Reduction of your production costs/labor D) Adding value to your production E) Access to better markets F) Others, specify: _____	__ __ __ __ __ __			

**Food and Agriculture Organization
of the United Nations (FAO)**
Emergency Operations Team, Ukraine
115 Office, 1 Borysa Hrinchenka str.
Kyiv, 01001, Ukraine
Tel.: +30 8093 738 0730
e-mail: FAO-UA@fao.org

Photo: ©FAO/Antoine E.R. Delaunay



**Food and Agriculture Organization
of the United Nations**

Food and Agriculture Organization
of the United Nations (FAO)
Emergency Operations Team, Ukraine
115 Office, 1 Borysa Hrinchenka str.
Kyiv, 01001, Ukraine
Tel.: +380 93 738 0730
e-mail: FAO-UA@fao.org