



WORLD FOOD PROGRAMME AFGHANISTAN
VULNERABILITY ASSESSMENT AND MAPPING UNIT

AFGHANISTAN FOOD SECURITY ASSESSMENT

July – August 2001

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AFGHANISTAN FOOD SECURITY ASSESSMENT

July – August 2001

1 - INTRODUCTION

This report provides the preliminary analysis of the survey that WFP Afghanistan's VAM unit together with a number of NGOs, undertook in July and August 2001. This survey covered the entire country during this two-months period, with the exception of areas inaccessible for security reasons.

This survey was conducted at two analytical levels. The first level refers to the average food security of a district. The second level goes deeper to determine variations among agro-ecological and socio-economic conditions. This shows that some specific areas can be food insecure in a district with an overall low level of food insecurity. Conversely, in districts that are classified as highly food insecure, some areas were found to enjoy reasonable food security.

1.1 - National context

For the past three years in row, Afghanistan has suffered from a severe drought, the worst in decades. The 2001 FAO-WFP crop and food assessment mission pointed out a cereal deficit of 2.2 million tonnes, which means Afghanistan could meet only 50% of its domestic needs. As it is combined with a near exhaustion of all-possible coping mechanisms for many Afghans, there was a high probability that such a situation leads to wide-spread hunger. After this alarming report, the entire Aid Community working in Afghanistan felt an urgent need for country-wide assessment providing information at a more programme-operational level.

1.2 - Objective

This survey has been undertaken to fill the food security information gap between national and household levels of analysis. The FAO-WFP crop and food assessment provides a useful national and, at best regional, picture of food production shortfall in Afghanistan. The household level locally defines the socio-economic profiles but does not enable a country wise comparison. To become able to target the most needy at district level, we have to go deeper than the first level and higher than the second one, and provide a nation-wide comparative analysis. This is why our survey provides an analysis of people's ability to cope with the degraded food security conditions, considering the specific conditions prevailing in the different parts of the country.

Its aim has been to assess the current levels of food security of the rural settled population, who account for 85% of all Afghans, at district level. This assessment does not include Internally Displaced Populations, nomadic groups or urban groups.

1.3 - Pre World Trade Centre bombing

This assessment was undertaken before the New York events the 11 September and the current retaliatory military strikes that started 7 October. Both immersed the country back in chaos. This could make humanitarian assistance delivery more difficult.

This assessment reflects a structural situation that takes into consideration the dominant types of farming systems and their productivity. The analysis remains valid regardless of consequent population displacements. However, food aid allocation can be adjusted based on consequent population movements.

2 - METHODOLOGY

The survey tool has been designed to allow a geographical targeting at district level to determine how much food aid to allocate to the various districts.

The main steps are:

- To define the indicators of medium term capacity to cope;
- To measure those indicators in each unit of analysis;
- To rank the districts according to their food insecurity level;
- To highlight pockets of high food insecurity in better-off districts;
- To recommend adequate level of food aid.

2.1 - Unit of analysis

The unit of analysis chosen for this survey is the district. It is an intermediate level between the FAO-WFP crop and food supply assessment that determines the national food balance and the numerous NGOs household surveys that allow localised detailed project planning.

For Afghanistan, it is also the smallest administrative unit for which population data are available. The UNIDATA population census done in 1991 is the reference we used with a 3% annual growth rate added every year.

Last year, the VAM team in the field updated the boundaries of the newly created districts and estimated the proportion of the population from the previous districts in these new units. As these new districts are not all recognised by the government, we called them field-working units. These are the units used in this survey.

2.2 - Medium-term indicators

Food security level is measured through the medium-term coping capacity. This coping capacity is calculated through the following indicators of income and assets, which are most critical for insuring medium-term food security:

- rainfed and irrigated wheat production;
- secondary crop production;
- fruit tree production;
- livestock;
- income from labour, remittances, handicraft or any other income generating activity.

These resources determine whether or not people can ensure their own food security during the coming twelve months following last harvest (end of June 2001). VAM is using the cultivation year as defined by FAO, which starts in July 2001 and ends in June 2002 for Afghanistan. Thus, the current level of food security in this report refers to the expected conditions in the twelve-month period, starting July 2001.

In addition to these indicators, information regarding the social structure, the land ownership and other coping mechanisms (out-migration, charity, loan, changing diet) has been collected to facilitate the interpretation of the results.

In order to be as close as possible to the specific conditions prevailing locally, food and livestock prices at district centre for the months of April, May and June were recorded. The averages for these three months are the values used for the survey analysis calculations.

2.3 - Data collection

Questionnaire

Survey teams of national agronomists collected detailed information according to a questionnaire translated into Farsi (questionnaire Annexe 1). Before going to the field they were trained by the VAM team on how to fill this questionnaire (refer to the guideline Annexe 2).

The survey team conducted group interviews at village level. The information collected during these interviews has also been crosschecked with field observations.

Zoning and Sampling

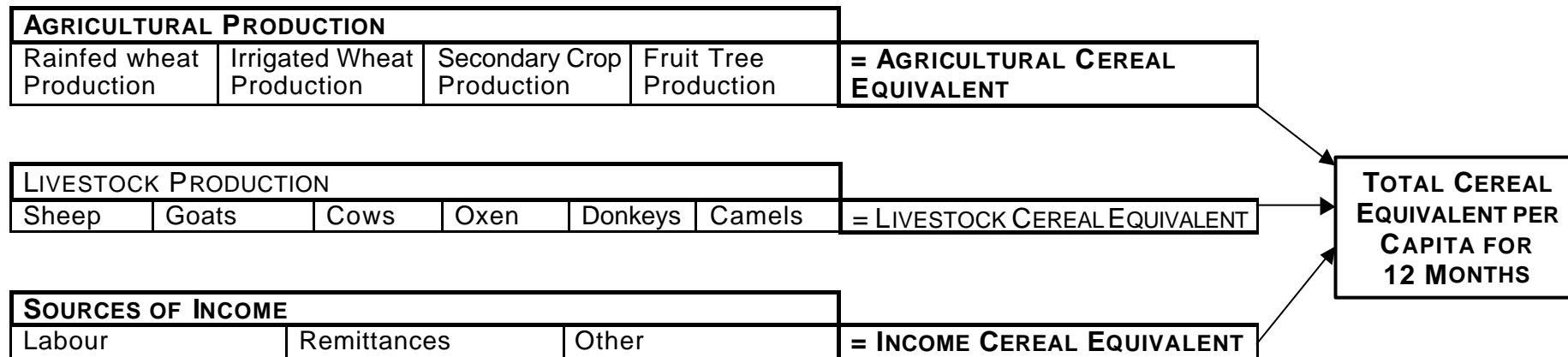
Each District is divided into agro-ecological zones according to the provincial land-cover atlas of the Islamic State of Afghanistan (FAO-UNDP, 1999). This zoning allows characterising the diversity within a district. In Afghanistan, altitude is the major factor determining the type of farming system (livestock or agricultural dominant) and water is the main factor limiting the agricultural production. Thus, the agro-ecological units are mainly related to rangeland, rainfed or irrigated agricultural farming practices. A sample of two to four villages is then selected in each agro-ecologic zone. In order to get as accurate information as possible with group interviews, the villages selected included between fifty to one hundred households. The number of villages selected in each agro-ecological unit is proportional to the area of each unit in each district.

A number of districts that enjoyed similar agro-ecological conditions have been grouped together. For these, results gained from one district were extrapolated to the other similar ones.

Data have been entered on Excel worksheets and sent to Islamabad for "cleaning" and analysis.

CEREAL EQUIVALENT TOOL

1 – Calculation of the Total Cereal Equivalent per Capita for 12 months



2 – Calculation of the minimum Energy Requirement per Capita per Year

- It is assumed that people cover 20% of their need
- Norms taken are: 100 g wheat equivalent to 330 Kcal
2,100 kcal per person per day, which is equivalent to 0.636 kg wheat per person per day
- **Minimum Energy Requirement per Capita per Year = $0.636 * 30 * 12 * 80 / 100 = 183$ Kg per Capita per Year**

3 – Calculation of the Percentage of Energy Requirement covered per Capita per Year

- **% of Energy requirement covered per Capita per Year**
= Total Cereal Equivalent per Capita per Year / Energy Requirement per Capita per Year

2.4 - Data analysis

The entire detailed method of calculations and results are in the annexes.

Cereal Equivalent (Annexe 3)

To analyse the agricultural production, livestock holding and the income in a standard unit, they were all converted to a common unit of measure: per capita Cereal Equivalent. Simply, this represents the amount of wheat that has been produced or that can be purchased against the fruit production, the existing livestock if sold or simply the income gained.

Wheat is the main cereal consumed in Afghanistan and represents at least 80% of the diet of the rural poor. Thus, it is the reference taken for the conversion into Cereal Equivalent.

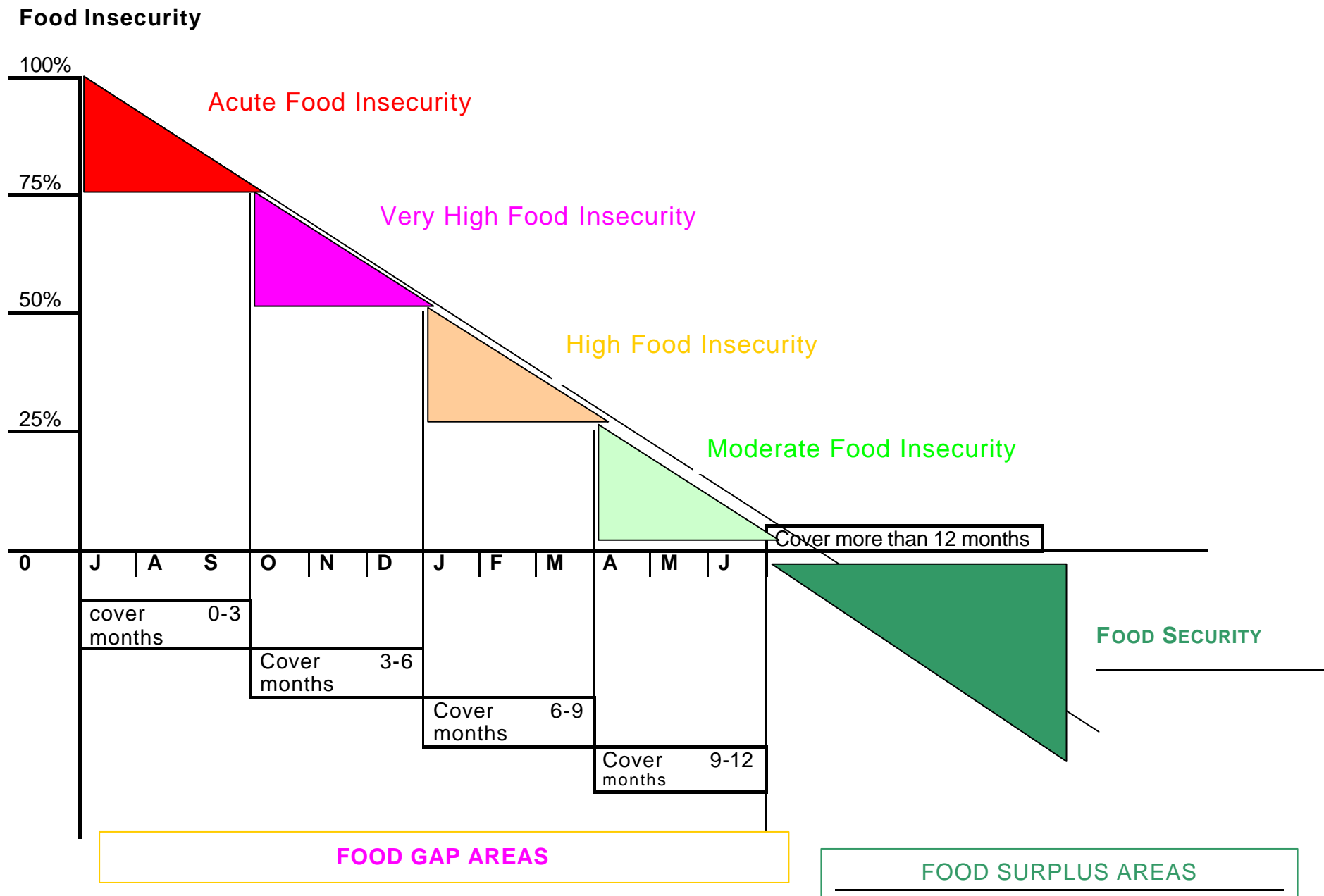
The data obtained from the questionnaire on each source were converted to “per capita Cereal Equivalent” and compared to the minimum per capita food need. The minimum per capita food need is calculated on the basis of 2,100 Kcal per person per day. Assuming people cover 20% of their basic food need, this minimum per capita food need is equivalent to 183 Kg per person for twelve months.

Two level of analysis

The data analysis is done at two levels answering two different programming needs at two different scales:

- A first analysis aggregates the data at district level allowing a comparison of the level of food aid needed in the different districts all over the country. This analysis reflects the average food security situation of each district and will guide programme planning at national level.
- A second analysis at sub-district level disaggregates the data according to the different agro-ecological zones within these districts. This determines the variation within a district and indicates where to target the food aid, especially if the district as a whole it is not very food insecure. At this level, pockets of high food insecurity appear in districts that are defined as comparatively better off at the first level of analysis. This level of analysis brings additional information for programme planning at local level.

DIFFERENT LEVELS OF FOOD INSECURITY IN AFGHANISTAN JULY, AUGUST 2001



3 - RESULTS

The results of this report are to be used in conjunction with previous assessments done at national and community levels.

3.1 - Levels of Food Insecurity

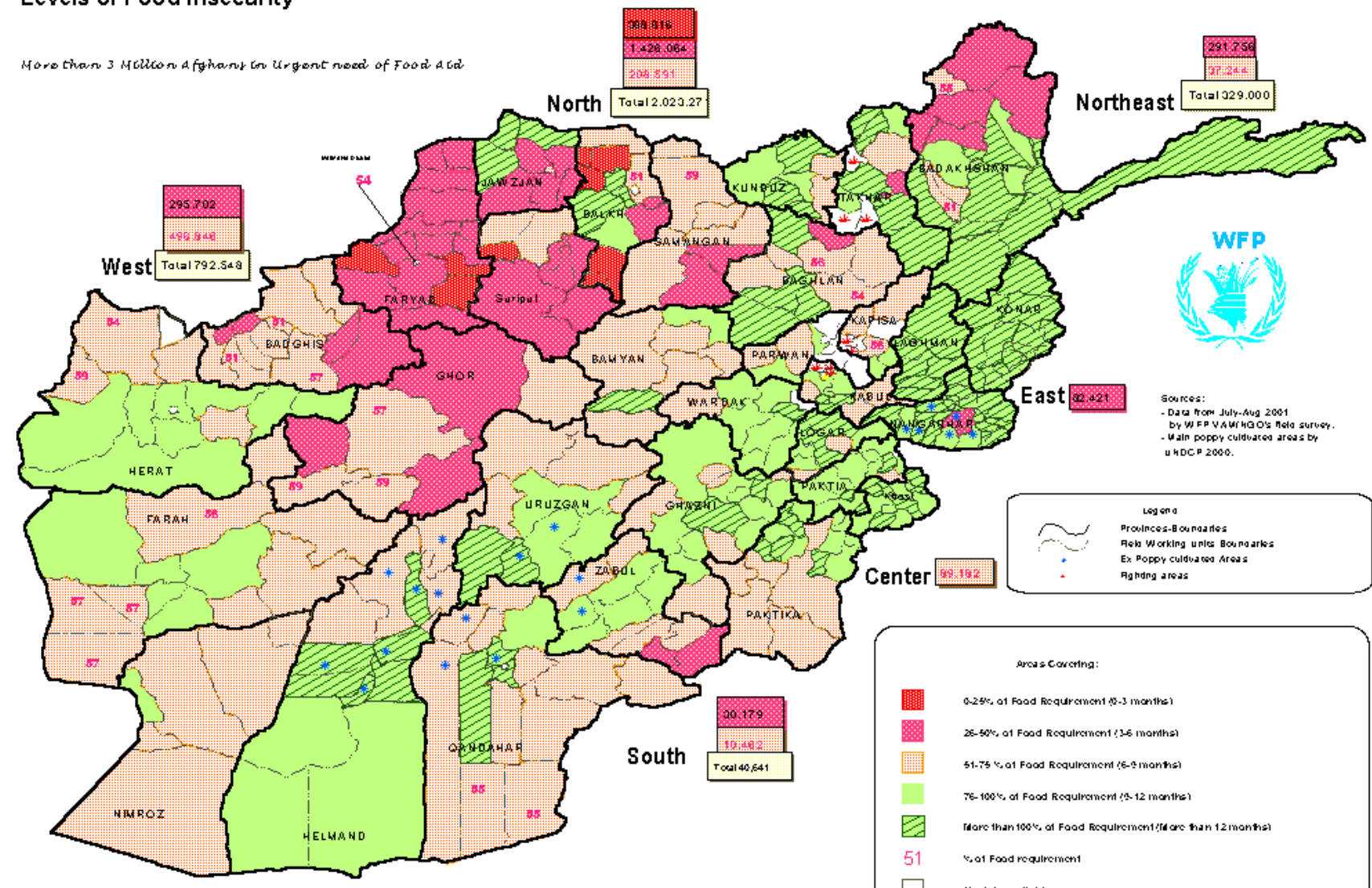
We classified the results into five levels of food security: four decreasing food insecurity classes and one food secure class.

1. Acute food insecurity class: 0 - 25% Energy Requirements
Areas falling into this class can cover up to one fourth of their annual basic food needs at best. They have enough food for a maximum of three months, from July to September inclusive. They will suffer from a nine to twelve-month food gap, starting October 2001.
2. Very High food insecurity class: 25 - 50% Energy Requirements
Afghans in these areas can cover from 25 to 50% of their food needs. Their average food resources cover three to six months maximum, starting July 2001. The food gap will last from six to nine months, starting October, November or December 2001.
3. High food insecurity class: 50 - 75% Energy Requirements
These areas will be able to cover from half to three quarters of their food needs, which is equivalent to six to nine months. They will start running out of resources between January and March 2002. Their food gap will last three to six months.
4. Moderate food insecurity class: 75 - 100 % Energy Requirements
This class has enough resources to cover nine to twelve months of their basic food needs. These districts have a three-month food gap, starting in April, May or June 2002.
5. Food secure class: more than 100% Energy Requirements
These areas cover the totality of their food need for the year and even more. Some areas can actually cover their food need for three to four years. In these areas, people have surplus that allows expenditures other than basic food.

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Levels of Food Insecurity

More than 3 Million Afghans in Urgent need of Food Aid



Sources:
 - Data from July-Aug 2001
 by WFP VAM/HGO's field survey.
 - Main poppy cultivated areas by
 UNDCP 2000.

Legend

- Provinces-Boundaries
- Relief Working units Boundaries
- Ex Poppy cultivated Areas
- Righting areas

Area Covering:

- 0-25% of Food Requirement (0-3 months)
- 26-50% of Food Requirement (3-6 months)
- 51-75 % of Food Requirement (6-9 months)
- 76-100% of Food Requirement (9-12 months)
- More than 100% of Food Requirement (More than 12 months)
- 51 % of Food requirement
- No data available

3.2 - National level

Until the next harvest season, at least three million Afghans in many Districts will not have access to sufficient quantities of food for ensuring their minimum requirements. The present situation in the most food insecure districts is an emergency that requires wide spread relief food distribution.

The 2001 FAO-WFP crop and food supply assessment mission reported lower rainfed wheat production compared to the year 2000 in the north, the east-central, the east central and the western regions.

Districts appearing in red and purple on the attached map are critically food insecure. The great majority of the households in these districts cannot cover more than half of their food need for the agricultural year. Districts in the north and north-west, which adjoin the worst districts, need to be given high priority, as households in these districts cover only slightly more than 50% of their food needs, for the same period. In the map, they appear in light brown with the percentage of energy requirement covered written in purple. The map in annexe 4 shows the food insecurity at provincial level.

North, Northwest and West

Overall, the western basin is more drought-stricken than the eastern one and the entire rainfed belt in the north is also affected. The epicentre of the crisis is in the north, north-western and western districts with the cumulative effects of three consecutive years of drought. Farah, Herat, Badghis and Faryab provinces were the most affected during the drought that occurred in 1969-1970, reported at this time as “two years of unprecedented drought in Afghanistan history” with “more than one million people threatened with starvation” (AID, Washington DC 20523). In 2001, the impact of the drought is far more severe, with a far wider impact towards the north, and put more than three million people at risk of starvation.

Northeast

The Northern districts of Badakshan are in the same situation, but as a result of a slightly different problematic. The present high food insecurity observed there is not so much an emergency due to a drought crisis but rather a chronic food deficit situation aggravated by drought and market disruptions. This province is the most isolated and underdeveloped in Afghanistan and has always been so in the past. It is connected to the rest of the country via one access road to Taloqan and Kunduz. For the past four years, fighting between the Taleban and the Northern Alliance has intermittently stopped the trade along this single highway. Thus, the food prices skyrocketed.

East and Central

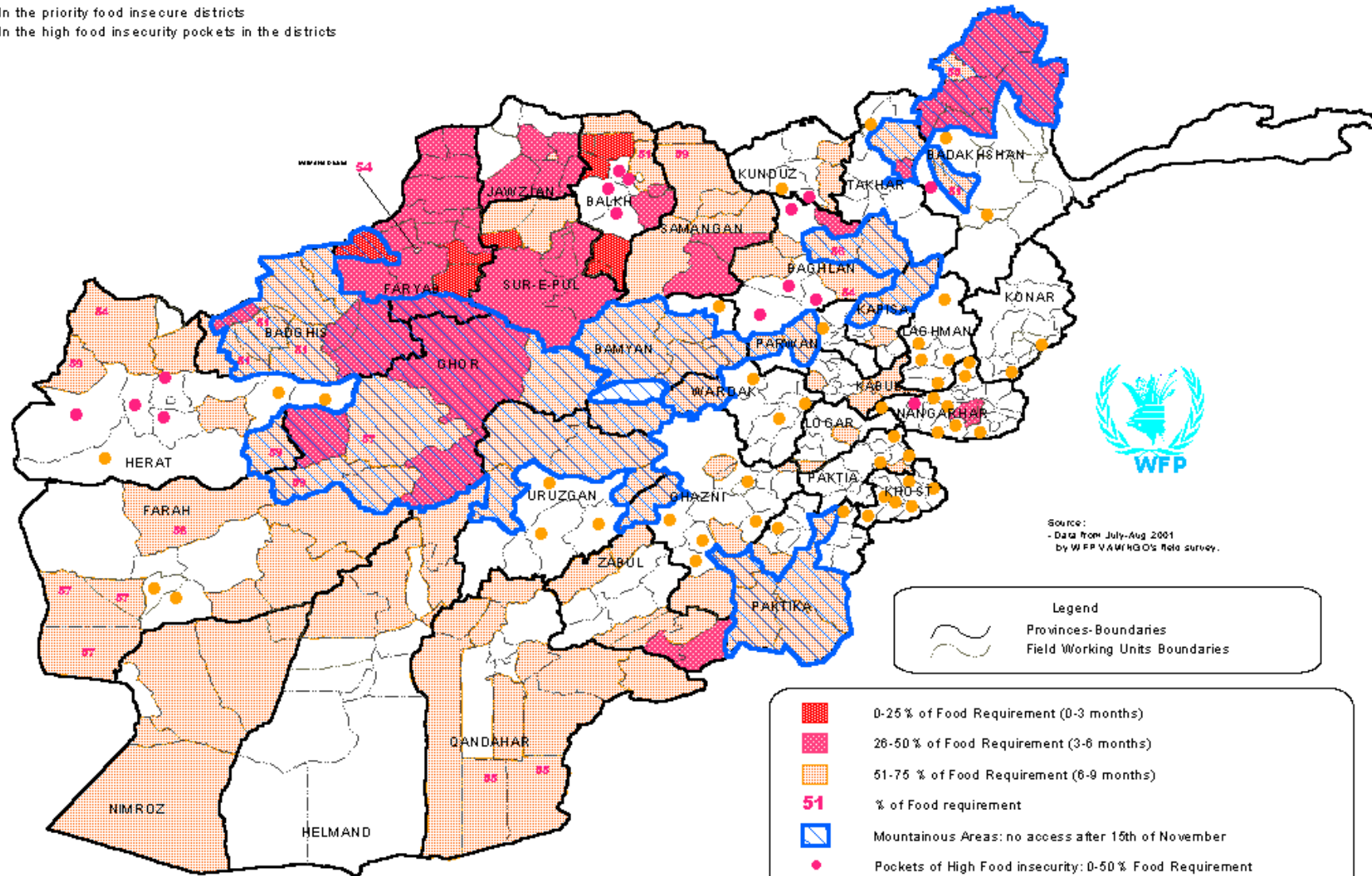
The eastern zone is comparatively less food insecure than the rest of the country. Many districts there were even found to have the equivalent of three to four years' food needs (see Map of the different levels of High Food Security in Annexe 4).

A majority of districts in the central region belong to the high food insecurity class, where people can cover six to nine months of their food needs.

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IMMEDIATE FOOD AID:

- In the priority food insecure districts
- In the high food insecurity pockets in the districts



Source:
- Data from July-Aug 2001
by WFP VAM/IGO's field survey.

Legend

- ~ Provinces-Boundaries
- Field Working Units Boundaries

- 0-25% of Food Requirement (0-3 months)
- 26-50% of Food Requirement (3-6 months)
- 51-75% of Food Requirement (6-9 months)
- 51** % of Food requirement
- Mountainous Areas: no access after 15th of November
- Pockets of High Food insecurity: 0-50% Food Requirement
- Pockets of High Food insecurity: 51-75% Food Requirement

South

A majority of districts in the South show the same level of food insecurity as the central region. Most of them will cover more than half of their food needs, with the exception of two districts in Kandahar province and two in Zabul province.

Number of needy people

All the most hit provinces are characterized by an extremely skewed landownership distribution. Large landowners account for 5 to 10 %, small landowners for 30 to 50% and landless people for 20 to 40% of the population. In these areas the most vulnerable people account for 80 % of the total population.

The most vulnerable Afghans in the most hit districts account for three million three hundred thousand people, distributed among the regions as follow:

- two millions in the North
- 800 thousand in the West
- 300 thousand in the Northeast
- 90 thousand in the central region
- 80 thousand in the Eastern zone
- 40 thousand in the South

Food insecurity and poppy ban

In the Eastern zone, there is no evidence of a link between the ban on poppy cultivation and food insecurity. In Helmand, compare to last year, the ex-poppy cultivated districts became more food insecure. In Helmand, poppy was the only crop, which was not the case for Nangahar, where poppy was one crop among others. This different pattern might explain the difference observed in terms of food security.

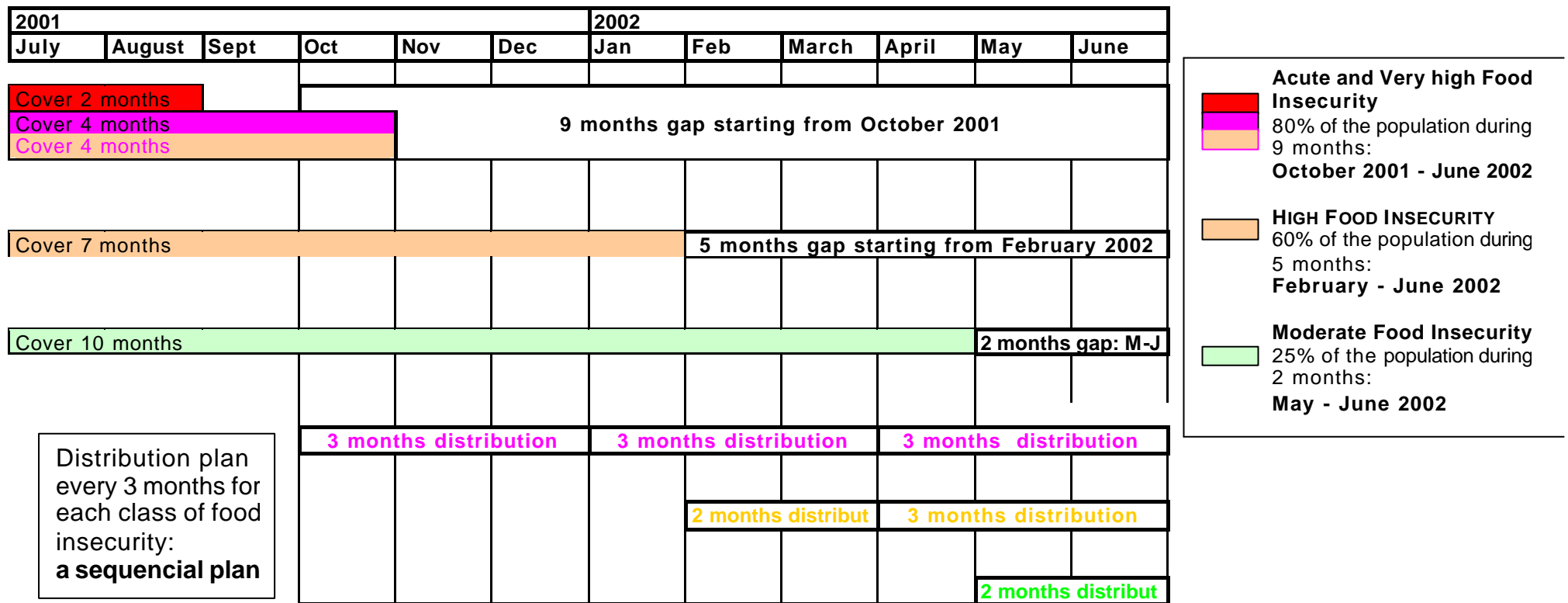
3.3 - District level

When data are disaggregated at sub-district level, pockets of high food insecurity appear in specific agro-ecological zones within the district. The map attached shows these pockets within the better of districts.

Highly critical situations appear in districts bordering the epicentre of the crisis, in Baghlan, Balkh and Herat provinces. Localised critical situations also appear in the Northeast, East and Southeast districts, mainly in Laghman, Nangarhar, Khost and Ghazni Provinces.

The most vulnerable in these pockets account for slightly less than one million Afghans.

TIME FRAME FOR FOOD AID DELIVERY COVERING THE NEEDS FROM OCTOBER 2001 TO JUNE 2002



3.4 - Food Aid Recommendations

Food aid recommendations reflect the duration of the food gap at district and sub-district levels and the dominant landownership observed. It is suggested to cover:

- 80% of the population during 9 months for the acute and very high food insecure classes (red, purple and light brown written in purple)
- 60% of the population during 5 months for the high food insecure class (light brown)
- 25% of the population during 2 months for the moderate food insecure class (light green)

In terms of Food Aid allocation, we assimilated the districts where the percentage of energy requirement is 51-59% with the Very high Food Insecurity class, in purple. In the map, these districts appear in light brown with a number written in purple.

Based on a standard family size of six members, the ration used to calculate food aid recommendation is 50 kilograms of wheat per family per month. This ration contributes for 972 kcal per person per day. WFP Afghanistan unit establishes these standards.

The detailed amount of food aid at district level and for the highly food insecure pockets are in annexes 5, 6 and 7.

3.5 - Critical operational factors

Onset of winter

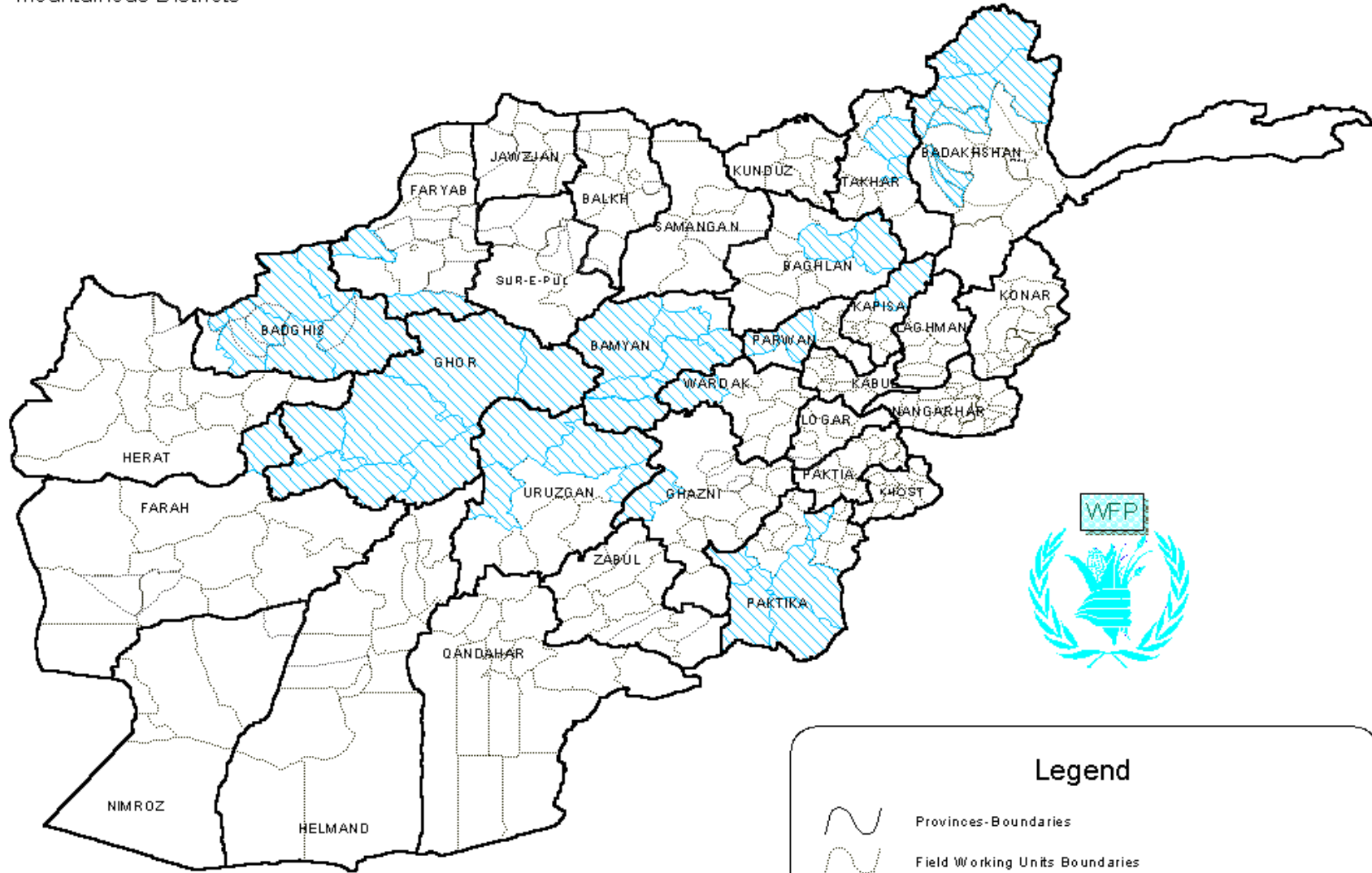
Districts outlined in blue in the map are subject to harsh winter conditions. Many of them will not be accessible after 15th November, some after the 15th of December. It is a major concern for the central highlands, the Panjshir valley and the North-eastern Districts bordering Tajikistan. They are all critically food insecure and are normally cut-off during winter.

For all these areas, districts and pockets highly food insecure, an immediate six-month distribution is planned.




Security

Lack of security is also an important factor that restricts access to a number of places.

AFGHANISTAN
Mountainous Districts



Legend

-  Provinces-Boundaries
-  Field Working Units Boundaries
-  Mountainous Districts: no access after 15th of November

CONCLUSION

This survey was a first attempt to cover the entire country in a very limited period of time but with as much depth as possible. Obviously there is room for improvement, especially regarding the sample size. However, it is worth mentioning that it took two months with more than a hundred surveyors to cover the country with an average of two to four villages per each agro-ecological zone. Unless we find at least twice more reliable surveyors, it would take four months to double the sample size!

However, despite its imperfections and limitations, it provides a comparative picture of the food security situation throughout the country for the next coming twelve months. The results are to be taken as a relative comparison between various districts rather than in absolute terms.

It should be stressed again and again that despite the fact that many districts, which are not classified as most at risk in our survey – eg. in the East and the South – are poor and could need food aid for a long term development. We have to focus our resources immediately on those districts that are the most affected in Afghanistan, where people could die without food aid. They represent three and half million Afghans among the rural settled population who need 170,000 tonnes of food aid for the coming six months.

REFERENCES

AID, 1970. Disaster Relief. Washington DC 20523, 9 p.

FAO - UNDP, 1999. Provincial land-cover atlas of Islamic State of Afghanistan. Utilization of Remote Sensing for the Inventory and Monitoring of Agricultural Land in Afghanistan.

FAO – WFP, 2001. FAO - WFP crop and food supply assessment mission to Afghanistan. Special alert No. 315. 27 p.

FLAMM (B), 1996. Zambia vulnerability assessment and mapping project: analysis of normal and current food security conditions. WFP.

1991. UNIDATA population census.