

# SRI LANKA

Joint Assessment of Drought Impact on Food Security and Livelihoods

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Assessment Technical Lead: United Nations World Food Programme

















### BACKGROUND

Compared with the past 30 years, rainfall during the North-Eastern monsoon season in 2016 was highly erratic and far below average in many parts of the country. More than half of the year's total precipitation fell in May 2016, while little rain arrived during the October-November inter-monsoon period. The consequential prolonged dry spell over the entire country meant that one-third of the normal paddy farms were not cultivated during the main "Maha" agricultural season (from Sept-March). Moreover, out of the total area cultivated, over 137,017 ha were destroyed due to a lack of water for irrigation and there was further yield loss due water stress.

In December 2016, the Ministry of Disaster Management, with technical support from the World Food Programme, conducted an analysis of secondary data on the impacts of the drought. The recommendations of the review were submitted to the Drought Response Task Force and the Cabinet of Ministers of the Government of Sri Lanka, with the recommendations endorsed by the Cabinet for rapid implementation by relevant line Ministries and agencies.

Following this initial review, the Inter-Ministerial Committee for Drought Response recommended to monitor the drought's impact on household food security and livelihoods. As such, a joint field verification exercise was conducted by the Ministry of Disaster Management jointly with the National Disaster Relief Services Centre (NDRSC), Disaster Management Centre (DMC) and Hector Kobbekaduwa Agrarian Research & Training Institute (HARTI), with technical support of the United Nations World Food Programme in February 2017. UNICEF, FAO and Save the Children partnered in the survey. The main objectives were to assess the household-level impact of the drought on the most vulnerable areas in the ten most affected districts. The exercise also estimated the immediate needs for food security, agriculture (inputs & seeds) and water to inform the design of potential short- medium- and long-term response options.

**KEY FINDINGS** 

The 2016/17 drought is the one of the major hits in Sri DISASTER (2012-2017) Lanka in the past five years, causing around 227,000 households to become food insecure so far in the affected areas. Community interviews also suggest that the households have not experienced this level of drought for 40 years (since 1974). Food insecurity is widespread and increasing in drought affected regions, with some areas having reached severely deteriorated levels of food consumption and over 16 percent of households becoming food insecure or borderline food insecure. Food insecurity is also reported as significantly higher among femaleheaded households. Food insecure and borderline households are also resorting to negative coping strategies such as selling livelihood assets, taking children out of school or reducing expenditures on health and hygiene. With the Maha harvest only concluding in

NUMBER OF FOOD INSECURE HOUSEHOLDS BY 227 500 144.750 104.825 92,500 66,550 2012 drought 2013 floods 2014 drought 2014 floods 2017 Drought Severely Food insecure and need assistance

February/March, the food security status of these groups will continue to deteriorate throughout the year and until the next harvest in March 2018. Regular monitoring of nutrition is underway and will help inform the impact and needed responses to the drought.



Around 60 percent of the affected households lost more than one third of their expected income during 2016/17 Maha season and all affected farming households need immediate support to compensate for crop loss to cultivate in the 2017 Yala agricultural season due to start in May.



Farming and Agricultural labours were identified as the most affected livelihood groups in surveyed districts which represents 70% of the affected livelihood groups. Every fifth farmer and every fourth agricultural casual laborer has been identified as food insecure.



Access to drinking water and water quality is a major concern with one-quarter of affected households seriously concerned about the quality of their current drinking water source.



Seeds are still a major constraint to plant the Yala 2017. Every fifth farmer affected by drought said they had no source of paddy seed. Only 10 percent of farmers have produced their own paddy seeds for the next season compared to more than 80 percent who usually produce seeds in the Maha season for use in the Yala. Identification of possible seed suppliers and demarcation of current successful paddy harvests for seeds is needed.

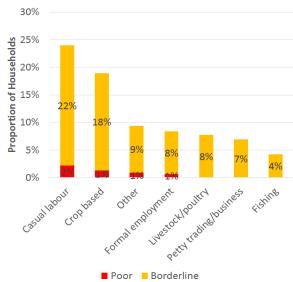


Half of the affected population requested cash or food assistance to meet immediate needs. (27% cash and 27% food).

## **I. Food Security**

Deteriorated food consumption: Results of the assessment show that the food consumption score (FCS) has severely deteriorated among the affected population and 16 percent of households surveyed have either poor or borderline scores. These rates are three times higher than during normal periods in Sri Lanka and are significantly higher than the 2012 and 2014 droughts. The worst food consumption levels were found among casual agricultural labourers and farming communities which represent more than 75 percent of the affected community. Out of the 10 districts assessed, four districts showed very poor food consumption levels (Mannar, Vavuniya, Kurunegala and Moneragala).

# FOOD CONSUMPTION AMONGST AFFECTED LIVELIHOOD GROUPS



This poor food consumption is three times higher among female headed households compared to those headed by males. The gender aspects of the affected population, already a major area of concern in Sri Lanka, should be carefully considered when planning the targeting for assistance.

Loss of income and lack of income generation opportunities: Approximately one third of the affected population have experienced more than a 50% reduction of their regular incomes. Therefore, the affordability of a minimum cost of a nutritious diet has dramatically decreased. Over 60% of the income drop is reported as a result of total crop failure, severe yield losses and loss of livelihood.

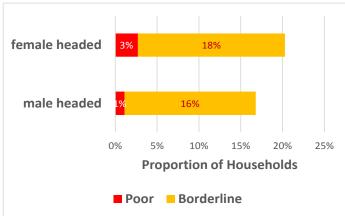
Indebtedness was also found to be very high. Currently over 60 percent of the households were reported to have

**outstanding short-term loans**. This amount is very high compared to the reported household income levels (36 percent of households earn less than 100 USD/month and 42 percent households earn less than 166 USD/month). An estimated of span of at least two years or two successful major agricultural seasons will be required to pay back the loans.

**Exhausted food security coping capacity:** Over half of the affected population is currently using negative coping practices to address food needs. Households are taking measures such as eating less preferred foods, limiting portion sizes, and reducing the number of meals consumed per day. Coping capacity is expected to worsen as the year progresses and wile prospects of the Yala harvest remain poor, and use of seriously negative coping behaviours such as taking children out of school and selling of livelihood assets could increase as limits of the initial coping practices are reached.

FOOD INSECURITY BY HOUSEHOLD GENDER

**Increased staple food prices:** The retail price of par-boiled long-grain rice has increased by 18 percent since May 2016, and is currently USD 0.67/kilogram. The terms of trade are also a concern, with the daily-wage labour vs staple food prices further declining as a result of the poor labour market opportunities and the increased retail price of rice. While the outlook is unfavourable for agricultural labourers, a reduction of taxes and relaxing of import quotas for rice are supporting availability and helping



#### Further reading:

Initial Rapid Drought Assessment, 2016 (https://www.wfp.org/Sri\_Lanka\_Drought\_Assessment). Food security review of Sri Lanka, 2017 (http://www.wfp.org/Sri\_Lanka\_Food\_Security\_Review).

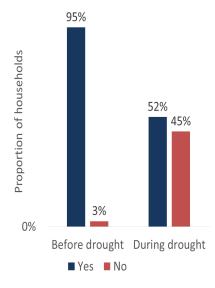
## **II.Water and Sanitation**

Overall, the quality of water was acceptable across the country, however 25 percent of the respondents were not satisfied with the quality of their water, with some areas citing serious concern: 31 percent from Mannar, 34 percent from Vavuniya and 46 percent from Kurunegala,

On the adequacy of drinking water, 41 percent of respondents claimed their water supply to be sufficient to cover their drinking water needs, while 43 percent reported 'some water shortages' and another 15 per cent cited severe shortages. Severe shortages were reported from Batticaloa (19 percent), Mannar (30 percent) and Ampara (41 percent).

Respondents were required to state whether they accessed water from their regular source, or from an alternative source, or both 65 per cent claimed to access water from their regular source, while 22 percent accessed water from a non-regular source. On a district basis, 22 percent from Batticaloa were accessing water from an alternative source, followed by 29 percent from Ampara, Moneragala (26 percent), 37 percent from Puttalam and Kurunegala (49 percent).

# SUFFICIENCY OF WATER FOR BATHING AND WASHING



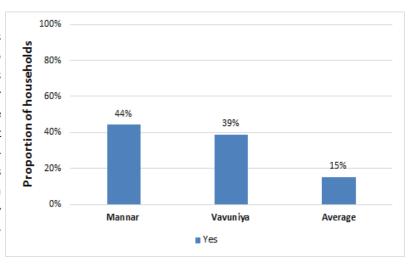
Regarding water collection for household needs, in 54 percent of the cases it was the mother and in 22 percent of the households it was the father. In 4 per cent of the cases, the children were sent to fetch water. On a district basis, collection of water for the needs of the household were concentrated on the mother. This was observed extremely high in the case of Vavuniya (65 percent), Ampara (73 percent), Mannar (80 percent), Moneragala (84 percent) and Hambantota (88 percent). Combined with the fact that many of them are the districts that already reported severe water shortages and had to shift to alternative sources of water, this raises a concern on potential threat to the child's safety and security in mother's absence.

On the sufficiency of water for latrine needs, 95 percent claimed water was sufficient to clean and flush toilets before the drought conditions. However, this dropped to 60 percent during the current drought. Similarly, on water availability for bathing and washing, 95 per cent of respondents reported to have had sufficient water before the drought but now, only 52 percent said they had sufficient water for these needs.

## III. Child Welfare

To capture the effect of the intensity of the drought on children, respondents were queried on whether drought conditions forced them to take out their children out of school. This was not the case in the majority of the cases (96 percent). A similar scenario was observed across districts. Households were also asked whether drought conditions were forcing them to reduce child expenditure on education. This was not reported by the majority of respondents (85 percent). However, 44 per cent of respondents from Mannar and another 39 percent from Vavuniya reported incidences whereby drought prompted them to cut these expenditures.

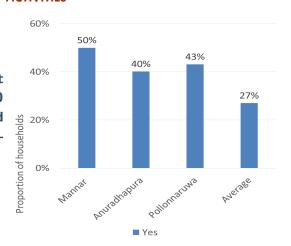
## REDUCED EXPENDITURE ON CHILD'S EDUCATION DUE TO DROUGHT



On child's welfare, households were inquired whether the drought condition has had an impact on the child's normal activities. Seventy one percent claimed that drought has not impacted their child's routine activities, while 27 percent stated otherwise.

On a district level basis, 29 percent from Ampara, 40 percent from Anuradhapura, 43 per cent from Pollonnaruwa and 50 percent from Mannar, stated that their child's activities had been disturbed by drought conditions during the time of the survey.

## IMPACT OF DROUGHT ON CHILD'S ROUTINE ACTIVITIES



# IV. Agriculture and Outlook for Yala 2017

Sri Lanka needs 2.3 million MT of rice for its annual consumption. The current most likely projections indicate production of only 1.44 million MT. The field assessment findings confirmed that there is a significant drop in the Maha 2016/17 cultivation and the country's main harvest is estimated to be approximately 50 percent below average. At this rate the Maha 2016/17 harvest is sufficient to provide less than four and a half months of the national demand of rice (Department of Agriculture, February 2017) compared to the normal 8-9 months of demand.

Limited carry-over capacity of water in the major irrigation reservoirs as well as the limited availability of seed stocks will be major factors affecting the coming Yala planting season. Despite periodic rains, the current water levels of the natural reservoirs is reported to be low (39 percent on average) while levels of more than 50 percent are required for planting in the Yala season. This low water level will greatly hinder the enrolment rate for the Yala 2017. The availability of seeds is also a significant uncertainty for affected households, with only 10% of farmers having produced their own paddy seeds to plant the coming season. One third of the farmers are planning to purchase from private vendors while 40 percent of farmers said they will rely on government intervention. Moreover, highly indebted farming communities will continue to struggle to find enough capital to invest in the 2017 Yala

## **RICE PRODUCTION FORECAST-2017**

3.50 3.17 3.01 2.85 3.00 2.77 2.56 2.50 2.20 2.13 2.05 1.93 2.00 1.50 1.00 0.50 2017\* 2017\*\* 2011 2012 2014 2006 2007 2008 2009 2010 2013 2015 2016 2005

If the all climate conditions are favorable in the coming Yala sesason (Yala 2017,) the total forecasted rice production is around 1.93 Mn

cultivation. Labor opportunities will

again be negatively affected, putting further hardship on this population

group.

MT.

If the Yala 2017 is not successful due lower carrying capacity, the estimated annual rice production will reach only 1.44 Mn MT.

\*\* Best case scenario \*\* Scenario with a failure of Yala 2017

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