



Empowered lives.
Resilient nations.

VIET NAM DROUGHT AND SALTWATER INTRUSION: *Transitioning from Emergency to Recovery* Analysis Report and Policy Implications



UNDP Viet Nam - JULY 2016

TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
1. INTRODUCTION	4
2. ASSESSMENT OF DISASTER EFFECT	5
Effects on Infrastructure and Physical Assets	7
Effects on Production and delivery of goods and services, access to services and goods.....	8
Considerations for Policy and decision making processes	11
Effects on Risks and Vulnerabilities	12
Total actual value of the effects of the disaster needs to be further analysed	12
3. RECONSTRUCTION AND RECOVERY NEEDS INCLUDING BUILD BACK BETTER	13
Short-term Needs.....	13
Medium-term Needs	13
Long-term Needs	14
Regional variation	14
4. TOWARDS A RECOVERY PLAN	15
5. ASSESSMENT METHODS	15
Annex: Accumulated number of drought days annually in the past 10 years (2007-2016)	17

EXECUTIVE SUMMARY

Viet Nam experienced the longest and strongest El Niño-induced drought and saline water intrusion period since late 2015, severely affecting more than 18 provinces in the three regions which produce key agricultural export and food security crops such as rice, coffee, pepper, fruits and aquaculture. Particular vulnerable groups such as the poor, women headed households, landless, people with disabilities, children and the elderly are more heavily impacted than others.

At the end of June 2016, the Government officially declared drought hydro-meteorological conditions to be over in the Mekong Delta and Central Highlands, but still on-going in South-Central Viet Nam. However, impact for affected households is still enduring and needs are still pertinent particularly in terms of water storage and purification, hygiene promotion, nutritional support and livelihood recovery.

Following the launch of the Joint UN-Viet Nam Emergency Response Plan in late April 2016, a consultation workshop on building resilience based approach to recovery from El-Nino and La Nina was jointly chaired by Minister of Agriculture and Rural Development and UN Resident Coordinator on 8 July. Representatives from 18 most affected provinces in Central Highland, South Central Coastal and Mekong River Delta region actively participated in the workshop, sharing information regarding drought related recovery needs, damage and losses, as well as providing ideas to inform the coordination of activities and plans with development partners.

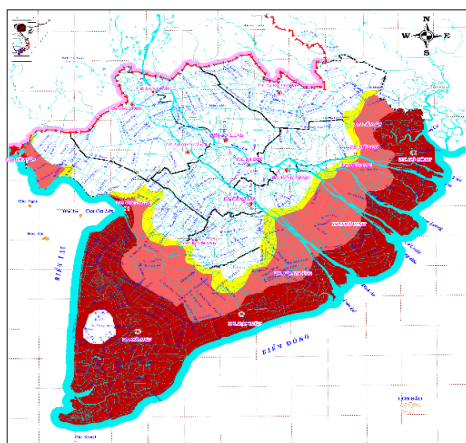
As part of further joint efforts towards supporting sustainable recovery from Viet Nam's 2015-2016 drought period, UNDP has been closely working with the MARD to organise extensive consultations particularly with 18 affected provinces. Further consultations with other UN agencies, NGOs community, Red Cross and other development partners to develop the second Joint UN-Government of Viet Nam Emergency Response Plan (ERP) were followed. With a focus on Recovery component, this ERP clearly highlights key medium to long-term interventions to 2020 to promote recovery, preparedness planning and disaster and climate resilience building.

This analysis report on 'Viet Nam Drought and Saltwater Intrusion: Transitioning from Emergency to Recovery' will focus on policy implications for the recovery component, as well as to be served as a key document for resource mobilisation for recovery response in the coming years. The current drought is a unique opportunity to not only "build back better" but also to learn lessons for future resilience building that will be particularly important in light of increasing climate change risk that makes similar droughts more likely in the future.

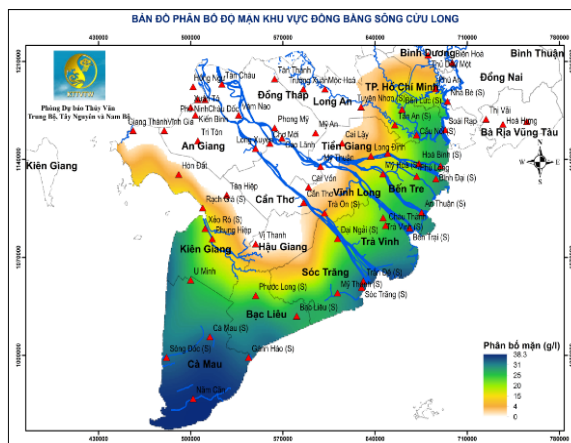
1. INTRODUCTION

The Recovery component of the Joint UN-Government of Viet Nam Emergency Response Plan for the drought and saltwater intrusion crisis clearly noted that essential medium- and longer-term interventions are required over the until 2020 to promote recovery, resilience and disaster risk reduction and climate change adaptation, especially for those Vietnamese most vulnerable to shocks.

Figure 1: Mekong Delta Saline Intrusion

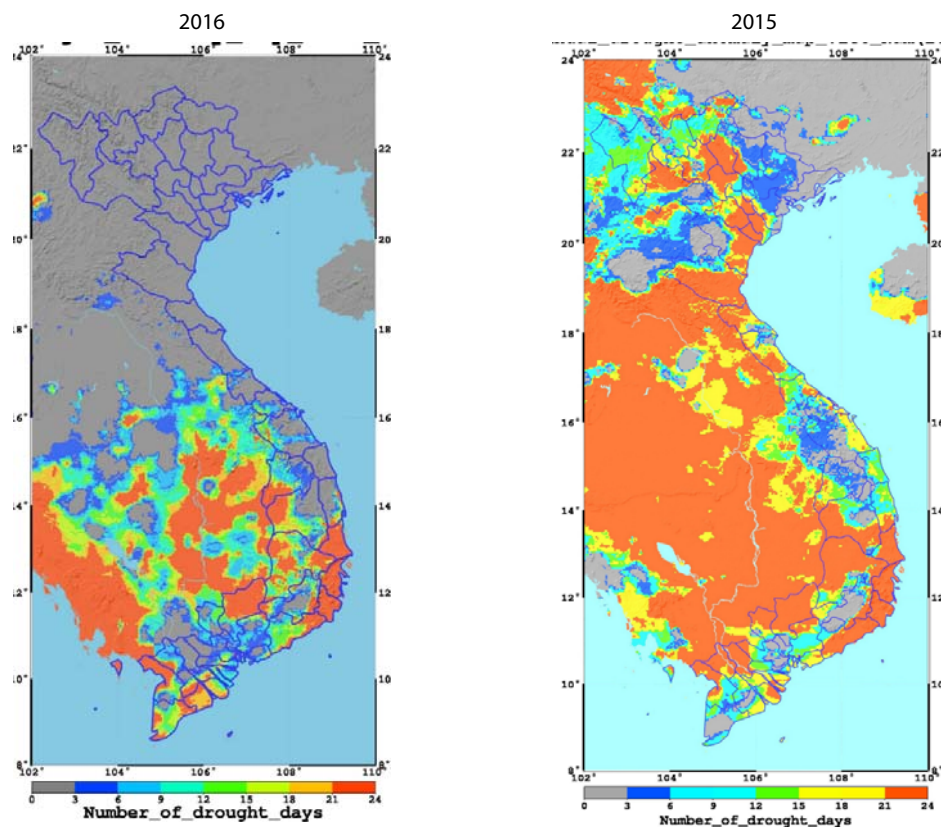


15 Mar 2016 (Source: MARD)



6 May 2016 (Source: MONRE-NCHMF)

Figure 2: Accumulated number of drought days



Source: <http://dubaokhinhau.vn/DMEWS/>

Priority actions comprise direct assistance to help the most affected farmers to replant their fields, as well as build-back-better investments that can strengthen future resilience to future droughts in the region. Interventions support an integrated water management approach that will reduce groundwater extraction, enhance water storage and built resilience to both future drought and flood related extreme events. Additional assessments and costing for these efforts are also required that differentiate between the ecological zones and particular circumstances of various provinces.

The ERP further outlined the following Strategic Goals & Mainstreaming Priorities for Recovery and building Resilience of the affected communities:

1. Ensure that the most vulnerable have access to resources (economic, financial, natural, human and social) to sustainably rebuild lives and livelihoods from the drought impact, while enhancing preparedness for future hazards and climate extremes;
2. Promote investment in sustainable water and sanitation, agriculture, natural resources management, health, food security and other infrastructure and systems that increase resilience to extreme climate events such as droughts and floods – with systematic integration into socio-economic development and sectoral plans;
3. Strengthen community based disaster risk management and climate change adaptation planning within communes, and upgrade national information management, assessment mechanisms and the monitoring of drought and its impacts, including the identification and targeting of the most vulnerable.

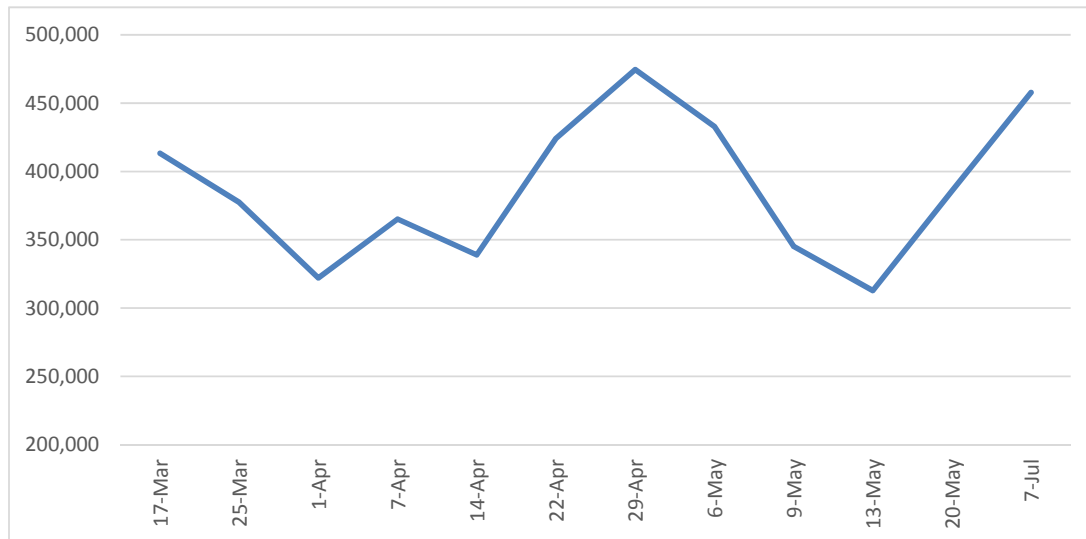
The current drought is a unique opportunity to not only “build back better” but also to learn lessons for future resilience building that will be particularly important in light of increasing climate change risk that makes similar droughts more likely in the future.

Viet Nam has strong capacity within the Central Committee for Natural Disaster Prevention and Control ministries to lead efforts to recovery and build resilience to future drought disasters. This will include stepped up partnerships not only with development partners but also action across ministries, and particularly with Provincial authorities, MOLISA (for social assistance) and MONRE (for improved hazard and climate related mapping). Strong engagement of the Ministry of Planning and Investment on planning and data and loss reporting, and the Ministry of Finance on both direct budget support and risk transfer and insurance mechanisms will also be required.

2. ASSESSMENT OF DISASTER EFFECT

The impact of the 2015/16 El Niño phenomenon has left parts of Viet Nam, including the Mekong Delta, South Central and Central Highland region suffering the most severe drought in more than 60 years. In the Mekong Delta, the drought and related decrease in groundwater levels have resulted in the most extensive saltwater intrusion in 90 years. Since mid-2015, 52 of 63 provinces – more than 83 per cent of the country – have been affected by drought and saltwater intrusion, of which 18 were severely affected and/or had declared a state of emergency as of 19 April 2016. As a result, an estimated 2 million people experienced acute water shortages and required humanitarian assistance primarily in water, sanitation, food security and health at the peak period.

Figure 3: Households without access to clean water, March-July 2016 (data source: CCNDPC)



In the Mekong Delta and South Central Regions and September 2016 in the Central Highlands, rainfall and river water levels are 30 to 50 per cent of seasonal averages in March. Government meteorological data shows that, from January to March 2016, South Central Region received 80-90 per cent less than the 10-year annual average, with no rain at all in Ninh Thuan and Binh Thuan provinces in the first three months of the year. In the Central Highlands and Mekong Delta, meanwhile, from November 2015 to March 2016, rainfall was 20-50 per cent less than the 10-year annual average, with no rain between January and March 2016 in the Mekong Delta.

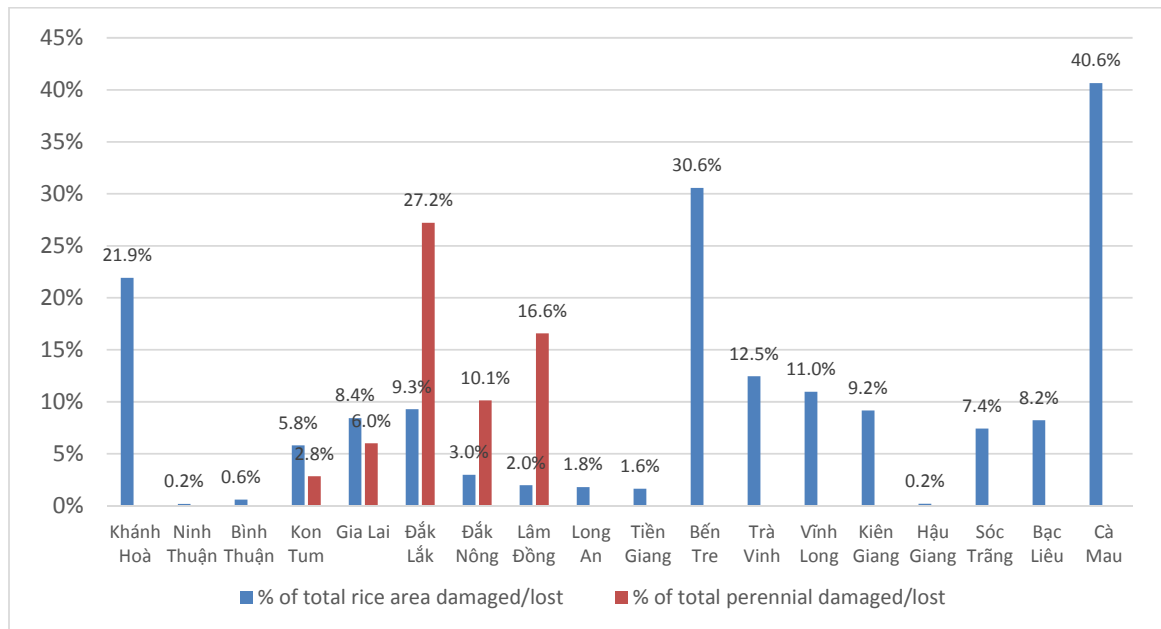
In coastal areas, saltwater intrusion extended up to 20 to 30 km further inland than average – up to 90 km inland in some areas. While an annual event, this level of saltwater intrusion, which is the result of poor rainfall, reduced flow in the Mekong River, and groundwater depletion, was the most extensive ever recorded. The saltwater intrusion left river water too salty for use for either human or animal consumption or to irrigate crops.

A total of 659,245 hectares of cropland, including more than 273,000 hectares of rice – the staple crop – have been damaged to varying degrees. Of the total damaged **rice** crop in the 18 most affected provinces, 161,030 hectares or 53.2% have suffered losses of 70 per cent of production or more, classified by the Government as ‘extreme loss’. Significant impacts on other cash and perennial crop yields have also been reported.

Crop damage and loss – as reported by the CCNDPC on 7 July - varies significantly between regions and provinces:

- 244,805 ha of rice in the **Mekong Delta** has been damaged or lost – 8.6% of the total rice area: with significant damage or losses in Ca Mau (40.6%) and Ben Tre (30.6%)
- 11,826ha of rice in **South-Central Vietnam** has been damaged or lost – 3.2% of the total;
- 17,541ha of rice in the **Central Highlands** has been damaged or lost – 7.4% of the total;
- 140,606ha of perennial crops (coffee, pepper, cashewnut etc.) in the Central Highlands has been damaged or lost – 14.9% of the total crops in the region; with major damage in Dak Lak (27.2%), Lam Dong (16.6%) and Dak Nong (10.1%)

Figure 4: Hectares of rice and perennial crops affected - % of the total area grown (data source: CCNDPC)



Some provinces avoided loss by following government advice to avoid planting - such as Binh Thuan where more than 15,423 hectares was not planted due to the drought. While this strategy reduced potential short term losses, it also means less income for affected farmers. These 'avoided losses' are traditionally not reflected in official damage and loss data.

Regarding key crops for different provinces (rice and fruit tree for the case of Mekong, and perennial crops for Central Highlands), the damage percentage is highest in Ca Mau and Ben Tre, with more than 40% and 30% of total area to be affected, followed by Dak Lak (20%). This indicates economic and human impact could be most serious in these provinces, particularly the three are among the most populous provinces...

In terms of implications of crop damage or loss for households, overall, an estimated 2 million people have lost their incomes due to the impact of the drought on the agriculture sector.

EFFECTS ON INFRASTRUCTURE AND PHYSICAL ASSETS

Although the direct effects on physical assets have been limited, the crisis has shown the need for a review of current water management practices within Viet Nam, and for renewed investments in improved water infrastructure and policies that can better address prolonged and pronounced water scarcity.

In particular the need to upgrade water access facilities has been highlighted as one of the key priorities in the short to medium term.



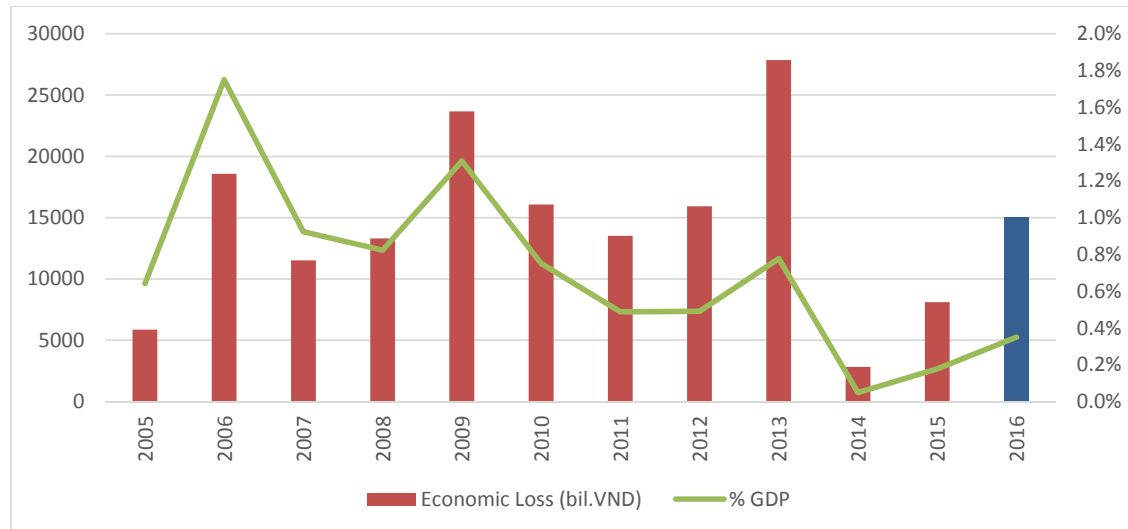
EFFECTS ON PRODUCTION AND DELIVERY OF GOODS AND SERVICES, ACCESS TO SERVICES AND GOODS

Loss and damage

As of 7 July, total economic losses due to the drought and saltwater intrusion to 18 severely affected provinces were estimated by the CCNDPC at VND 15,032 billion¹ (approx. US\$ 674 million), equivalent to about 0.35% of GDP in 2015. Although only halfway through the year, the economic loss for 2016 is already among the highest in the past decade (even though the traditional typhoon and storm season has not yet started).

It is estimated that the average economic losses due to natural disaster annually is approximately around 0.74% GDP over the period of 2005-2015 and the trend is receding. Majority of the losses were accounted for flood and storm damages. However, in 2016, with the impacts of drought only was 0.35% as of July while the monsoon season has not yet started.

Figure 5: Annual disaster economic loss (VND billion) 2005-2016 (data source: CCNDPC)



Provinces who report the highest economic losses from the drought are Ninh Thuan, Dak Lak, Ben Tre, Kien Giang, Ca Mau, Dak Nong, Tra Vinh and Soc Trang.

As the insurance industry is under-developed in Viet Nam, loss compensation, if any, will come almost exclusively from the Government budget. While larger commercial farms have been severely damaged by the drought, many have financial capacity and assets to offset losses over the medium to long term.

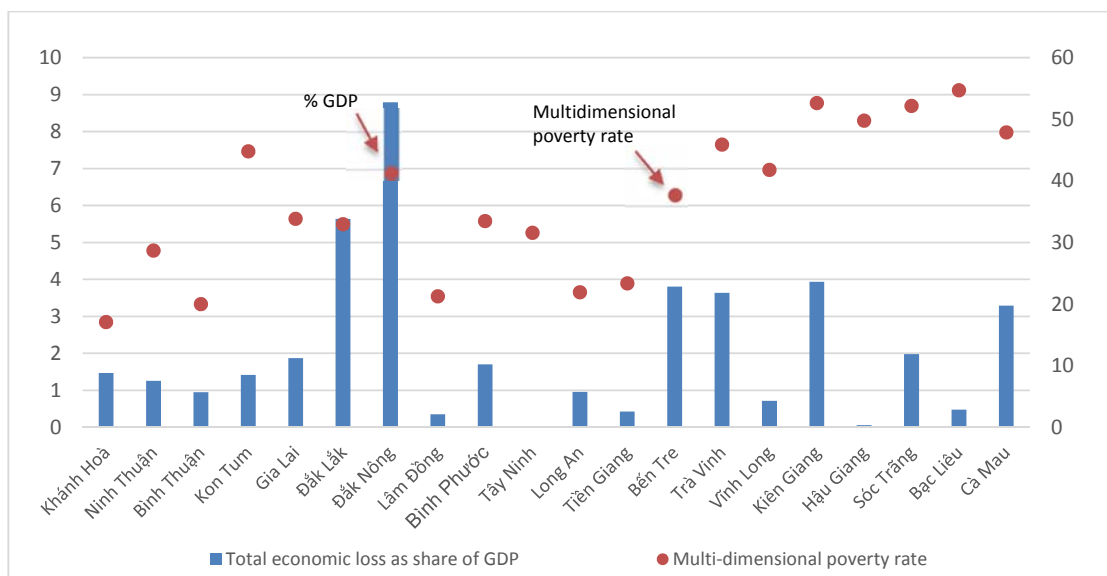
However, for small-scale, poor farmers the situation is catastrophic. The drought has impacted some of the poorest provinces in the country, and even in better off provinces, it has hit the poorest segments of society most deeply.

Of the 18 most affected provinces that have declared emergency, 9 had poverty rates above the national average of 6% even before the drought. In four of these provinces (Kon Tum, Gia Lai, Dak Nong and Soc Trang)

¹ Noted that the estimated losses and damage here only covers direct parts of drought and saline intrusion to agricultural and rural sector, and only for 18 most affected provinces. The actual number should be much higher considering other and indirect impacts to other sectors, infrastructure and people, etc.

poverty rates before the drought were more than double of the national average.² Soc Trang also had the highest near poor rate among 18 provinces with 13.1%. When the comprehensive multi-dimensional poverty rate³ is taken into account, the figures are even more striking with 15 out of 18 having poverty rates above the national average of 21.3%. Among them, Mekong River Delta generally emerged as the most deprived region, notably Bac Lieu, Kien Giang and Ca Mau where more than half of households defined as multi-dimensionally poor. Deepening further drought and saline intrusion effects, these provinces deserve more comprehensive support from a medium and long term sustainable perspective.

Figure 6: Higher losses are more likely to come with poorer provinces (data source: CCNDPC)



Although the Mekong provinces impacted are richer in total, much of this economic growth is generated from industry or urban centres like Ho Chi Minh city or Can Tho. Mekong Delta provinces are widespread deprived in many non-monetary aspects, both in terms of the headcount as well as intensity level. In Ben Tre, where more than 40,000 families lacked access to adequate water during the drought, the pre-drought multi-dimensional poverty rate was 37.7% (2012) and more than 42% of households lacked access to hygienic sanitation facilities based on data from 2014 mid-term Population and Housing Census.

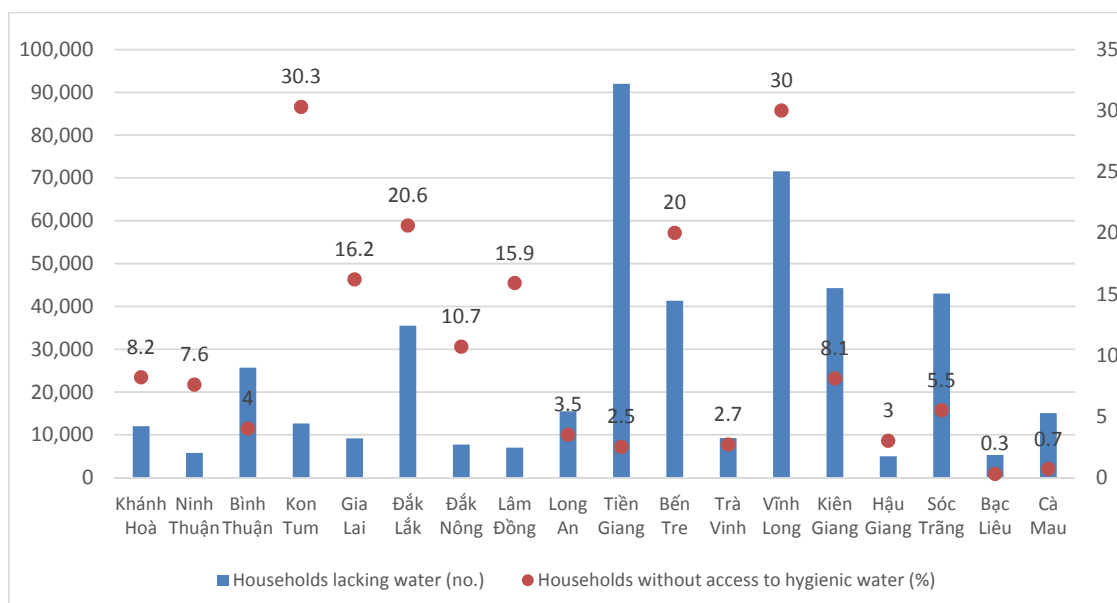
Drought affected provinces also lagged behind in terms of access to sanitation. Even before the drought, in 14 out of the 18 drought affected provinces, the number of households without access to hygienic toilet and sanitation facilities was higher than the national average of 29%.

Regarding water situation, there was close correlation between the households access status to hygienic water (before the drought) and their lack of clean water during the status. While the definition of ‘clean’ and ‘hygienic’ water could be different, they share similar implications, that provinces deprived of water often those suffered from water deficiency. Most pronounced could be seen in Vinh Long, Ben Tre and Dak Lak and Binh Phuoc. Some provinces like Tien Giang, Tra Vinh, Binh Thuan and Ca Mau where not many households being lack of water before (ranging from 0.7-4% households), now reported high number.

² Source: GSO 2015

³ Multi-dimensional poverty rate calculated by GSO, is extracted from the National Human Development Report 2015. It is based on with 9 indicators under five dimensions representing education, health, housing, clean water and sanitation, and finally access to information.

Figure 7: Households lacking clean water during the drought - compared to HH without access to hygienic water before (data source: CCNDPC)



This baseline poverty has knock-on impacts on childhood nutrition and well-being. In 7 of the 18 provinces, the prevalence of underweight children under five years old was higher than the national average of 14.5%, and in 6 out of 18 the under-five mortality rate was higher than the national average of 22.4‰. This correlation is particularly pronounced in the Central Highlands where under five mortality stands are 60‰ in Kon Tum, 44‰ in Gia Lai 31‰ in Dak Nong and 37‰ in Dak Lak. In 14 out of the 18 provinces literacy rates of those above the age of 15 are also lower than the impressive national average of 95%.

The pre-existing development deficit has been made worse by the drought, and impacts are expected to place a further drag on development. Crop yields and water supply have been severely disrupted by the drought, and salt water intrusion impacts in many areas of the delta will take months, if not years to be reversed, preventing replanting and having a long term impact on yields.

Aquaculture industries have also been severely impacted, particularly in Ca Mau and Ben Tre but also in other coastal provinces. This is significant as low-saline water shrimp farming is the main livelihood for many coastal farmers as well as significant income source. However, as saline levels were elevated, even this livelihood was no longer feasible.

Women make up more than 60% of poor farmers in Viet Nam who have been worst hit by the recent drought. With increasing migration of men to urban areas in search of work, there is a growing trend of women remaining in rural areas and leading on cultivation and childrearing or caring for the elderly. This double burden of agricultural and household workloads stands to be significantly increased during the recovery period, as additional tasks such as land clearance and replanting will be required.

Health centers and schools in highly impacted communes suffered water shortages, hindering service delivery and some health centres struggled to cope with increases in dermatological conditions and infections associated with prolonged drought.

CONSIDERATIONS FOR POLICY AND DECISION MAKING PROCESSES

The drought has highlighted issues for further consideration by the Government in terms of decision making:

- The drought has highlighted that current disaster prevention and control systems are mainly designed for flood and storm conditions and that SOPs, **data management and coordination processes are less well suited for drought or prolonged disasters or disasters at a regional or multi-provinces scale**
- Response measures at the household level focus on direct distribution of water and rice, which is useful but is seldom sufficient to meet needs or reflect a balanced nutritional response, and does not begin to address wider recovery. There is significant scope for **further consideration of other mechanisms, including cash transfers, guaranteed work programmes for poor families and debt relief** which could be more effective in supporting those most affected. Better balanced food packages should also be considered as complementary to rice distribution
- The drought has clearly shown that within the drought affected populations, poor families are most directly exposed, and that children, the disabled and the elderly are at high risk during the relief phase. Women make up more than 60% of poor farmers and face additional burdens during the recovery phase to reinitiate agriculture and meet household care and financial obligations. However, relief and recovery efforts mainly concentrate on support to MARD and provincial infrastructure, **while linkages between social safety nets and target programmes for the extreme poor are not yet able to respond to extensive disasters with target assistance for the extreme poor and/or women or other vulnerable groups.**
- **Improved integrated and inter-provincial water management planning and policies are required** that can manage both floods, droughts, and increasing water demand in both highland and coastal areas, within the boundaries of ecosystems.
- **A paradigm shift is needed in terms of long term agricultural planning**, to promoting quality instead of quantity output, with agro-ecological inter-cropping options as alternative to current mono-cropping systems, which are too sensitive for irregular climatic conditions, including drought
- **Management strategies need to recognize the economic and environmental value of water and forests as key development assets.** They also need to incentivize sustainable agricultural methods, such as flood water storage, water efficiency, improved soil management, agroforestry etc. over environmentally degrading processes such as excessive groundwater exploitation for agriculture, which can even intensify saltwater intrusion in some areas. Such policy development will require investments in improving regional planning and inter-ministerial dialogue backed up by improvements in infrastructure such as dyke systems and community water storage facilities combined with forestry and mangroves.
- **The drought has also showed the need for improved analysis and data on risk and vulnerability in Viet Nam-** particularly with regards to understanding how the aspects of multi-dimensional poverty, including indebtedness, access to sanitation and reliance on non-cash assets can be impact recovery to disasters. This suggests the need for more targeted approaches, and social safety nets for
- **Financial risk sharing and insurance mechanisms are not well developed in the agricultural sector** in Viet Nam, and as such the Government is effectively the provider or last resort of both humanitarian assistance and recovery support. Currently this is done largely through ad-hoc financial allocations, and there is a need to be both better systematise the operation of disaster funding mechanisms and also to develop risk transfer and sharing mechanisms.

- The drought has also shown the **potential for private sector engagement in response and recovery** (including mobilizing private funding), but this should be systematic and incentivized through targeted policies, regulations or mechanisms
- **Further efforts to collect, monitor and manage data both on hazards impacts and damage and loss are required, particularly with regards to saltwater intrusion and groundwater availability.** Stronger linkages between government and academic institutions are required. MARD also need to significantly improve field based damage and loss data collection and increase access to and analysis of data.
- **Viet Nam’s disaster early warning system should also integrate drought and salinity monitoring** and engage farmers in monitoring hydro-meteorological conditions, including salinity for improved triangulated data and early action.

EFFECTS ON RISKS AND VULNERABILITIES

According to national climate change projections, Viet Nam is at high risk to more extreme climate impacts, including droughts and floods, suggesting a shortening of return periods for future extreme drought events. In addition, the saltwater intrusion impacts felt in Mekong areas are broadly consistent with future projected trends due to sea-level rise. This suggests that further action to understand and monitoring trends, and also to factor these into development planning.

Equally important, the drought has significantly increased the vulnerability of poor and near poor households in the affected provinces. In recent years, farmers in many areas have achieved impressive increases in agricultural production. This has been facilitated in part by increasing access to credit, with many farmers taking loans for seeds, fertilizers and tools which are then repaid after harvests are sold. In communes where the drought has impacted multiple harvests, these systems have broken down leaving many of the poorest families heavily in debt.

Anecdotal evidence suggests that indebtedness can have knock on impacts in terms of increased urban migration, unfair labour exploitation of vulnerable people and reduced available income to invest in education and other important household assets. Rapid action now to address these factors in the most affected households can have significant impacts on future development and household asset security. Further research is required in the coming months to better understand these trends.

TOTAL ACTUAL VALUE OF THE EFFECTS OF THE DISASTER NEEDS TO BE FURTHER ANALYSED

The total economic impacts of the direct agricultural losses due to the drought and salinewater intrusion disaster is estimated at 0.35% of total 2015 GDP. As mentioned above, this number does not include the actual losses and knock-on impacts to the wider economy, and to households.

There is a need to further analyse these trends and to better understand the economic value of drought losses, including the value of total/partial destruction of infrastructure and assets, value of changes on production of goods and services, delivery of services and access to services and goods, macro-economic impact, human development impact and how different sectors have been impacted to date.

3. RECONSTRUCTION AND RECOVERY NEEDS INCLUDING BUILD BACK BETTER

Findings from JAT assessment and expert consultations to date point to the following key short, medium and long term needs for recovery. The needs will be further consulted with provinces, stakeholders by the Government and UNDP to priority recovery needs for Viet Nam for the coming years. Specific considerations need to be made for all of these to ensure actions are gender-sensitive and targeting the needs of the most severely affected. The following is the indicative list of needs for Provinces to recover from the Drought and Saltwater intrusion in El – Nino context.



SHORT-TERM NEEDS

- Cash for work for impacted households to clear land and be able to restart production
- Debt relief for ultra-poor households who face economic ruin due to debts to local cooperative banks, as well as renegotiation of current loan repayment conditions for other poor and near-poor
- Recovery-targeted microfinance programs to provide flexible credit for near-poor and poor, as well as Small and Medium Enterprises (SMEs) affected by the drought
- Development and updating of disaster prevention and control plans in affected communes to map risk, plan for recovery and also potential El Nina floods
- Seeds, livestock feed, other agricultural inputs and tools (as direct support or subsidies) to help poor farmers replant and establish livelihoods
- Collection of lessons learned from the relief operation to document good practice from provinces and areas where adjustments for future systems and policies may be required
- Step-up early recovery assessments by provinces to provide enhanced data. This is particularly important as significant regional differences are evident in the drought impacts, and some provinces are still concentrating on relief rather than recovery operations.
- Support production of drought- and salt-resistant/tolerant seeds
- Technical assistance for climate change adaptation (e.g. restructuring livestock and crop production with varieties adapted to climate change and livelihoods diversification, as well as technical trainings on best agricultural and livestock production practices) – applying gender-sensitive Farmer Field School approaches and with engagement of farmers who have successfully dealt with the drought and saline intrusion
- Vocational training to diversify (short or long term) into non-agricultural livelihoods
- Support improved irrigation techniques and access to markets
- Rainwater harvesting
- Large scale community awareness and behavioral change campaigns and activities

MEDIUM-TERM NEEDS

- Community based water storage schemes to better retain flood and rainwater for both agricultural and household use.
- Large scale community awareness and behavioral change campaigns and activities

- Review of policies and operating procedures for disaster prevention and control to better accommodate slow onset disasters, including drought and saltwater intrusion.
- Formulate an appropriate water use plan prioritising water for domestic use and adjusting cropping, livestock and fisheries to adapt to water conditions
- Prepare a national plan for water storage and regulation in hydropower reservoirs to increase downstream water access in dry periods
- Increase water retention and groundwater recharge capacity in drought-prone parts of Central Highlands and South Central regions
- Increase water retention, groundwater recharge and build salt water intrusion defences in the Mekong Delta and South Central region
- Enhance study and technical assistance to cope with river bank and coastal erosion
- Develop and implement forest fire prevention and control programmes in case of future drought events
- Afforestation programs (forests, mangroves), through co-management mechanisms
- Increase mainstreaming of DRM and assessment in the prioritisation and implementation of investment programmes
- Develop a drought index to be integrated into a comprehensive early warning system

LONG-TERM NEEDS

- Improved social safety net policies
- Improved parametric risk insurance/ transfer schemes that can help poor farmers access benefits based on weather related indexes
- Water pricing and public-private partnerships to encourage sustainable agricultural practices and improved water storage and management – with continuing piloting of Payment for Ecosystems Services schemes
- Enhanced desalination plants for the Mekong which can better ensure sustained drinking water supply in the Mekong
- Increased investment in agricultural methods that use less water, coupled with assessment of areas where shifting crop types can maintain or increase income with less water consumption
- Improved policies to reduce groundwater exploitation for agriculture and encourage sustainable agriculture practices
- Review of current dyke and water defences to reduce salt-water intrusion and to encourage appropriate harvesting of flood or rain water
- Improved regional dialogue with Mekong countries regarding trans-boundary water flows
- A long term multi-sectoral Drought Mitigation Action Plan
- In-depth research on drought risk, impact and vulnerabilities – to inform policies and programs

REGIONAL VARIATION

It is important to note that drought impacts vary considerably across and within provinces. With the on-set of the rainy season in the Mekong, recovery work is essential in these areas now. In other provinces in central highlands where rains have not yet been received, some actions, such as support to replanting will not be possible until later in the year.

More than one third of provinces in Viet Nam have been severely impacted by the drought, and recovery action should reflect the unique nature of the impacted areas in terms of pre-existing conditions and ecological characteristics as well as current drought conditions. Some provinces have well established disaster prevention and control systems that have been able to adjust their operations to the drought, others have

been required to set-up and scale-up systems from a small base. These factors also contribute to regional variations in impacts and recovery.

4. TOWARDS A RECOVERY PLAN

The Government outlined the broad frame of its recovery planning in the joint Emergency Response Planning Document presented by Minister Phat of MARD and UN RC Pratibha Mehta in April 2016. From July, the Government has started verifying and costing the key actions outline in the plan. Moving forward with this planning will be essential for further effective recovery.

Such a plan should ideally should help analyze priority needs by sector, highlight required interventions, potential recovery costs, outputs and outcomes over the short, medium and long term for social, productive, infrastructure and other relevant sectors.

The Ministry of Agriculture and Rural Development remains the focal ministry for disaster prevention and control coordination as mandated in the Law on Disaster Prevention and Control (2013). The Government of Viet Nam is planning to organize consultation with development partners in the coming weeks to jointly outline the recovery vision and guiding principles. This will include further analysis of current data availability and gaps, monitoring and evaluation, resource mobilization mechanisms, recovery challenges and key assumptions and constraints.

The Government has already requested development partners to reassess and re-program existing portfolios to support relief and recovery and has been active in reaching out to donors and other organizations regarding opportunities for recovery partnerships and enhanced implementation arrangements.

5. ASSESSMENT METHODS

This report is based on data collected from Government sources, including consultation with national DPC department officials, provincial leadership and DARD officials, as well with a desk review of drought related research to date. CIAT et al drought and saltwater intrusion assessment reports have also provided important data and analysis as have UNDP field mission reports to date. It is anticipated that analysis can be further enhanced based on data from planned monitoring missions in late June and when FAO data collected to date becomes available.

Analysis has from field missions aims to gather information to identify⁴:

- available baseline information from before the crisis that can be used to identify early recovery information
- gaps, and can inform judgements about pre-existing standards in the crisis setting; the impact of a crisis on the affected population, the most urgent needs, and entry points to address the needs; existing local capacities and capacity-building priorities
- who is doing what where i.e. a mapping of activities by different agencies;
- ongoing development initiatives that can be built on or reoriented to contribute to early recovery;

- underlying causes that generated or exacerbated the crisis
- the human rights claims related to the main humanitarian needs and development challenges as well as the corresponding obligations of duty-bearers – State and non-State actors- and their capacity gaps;

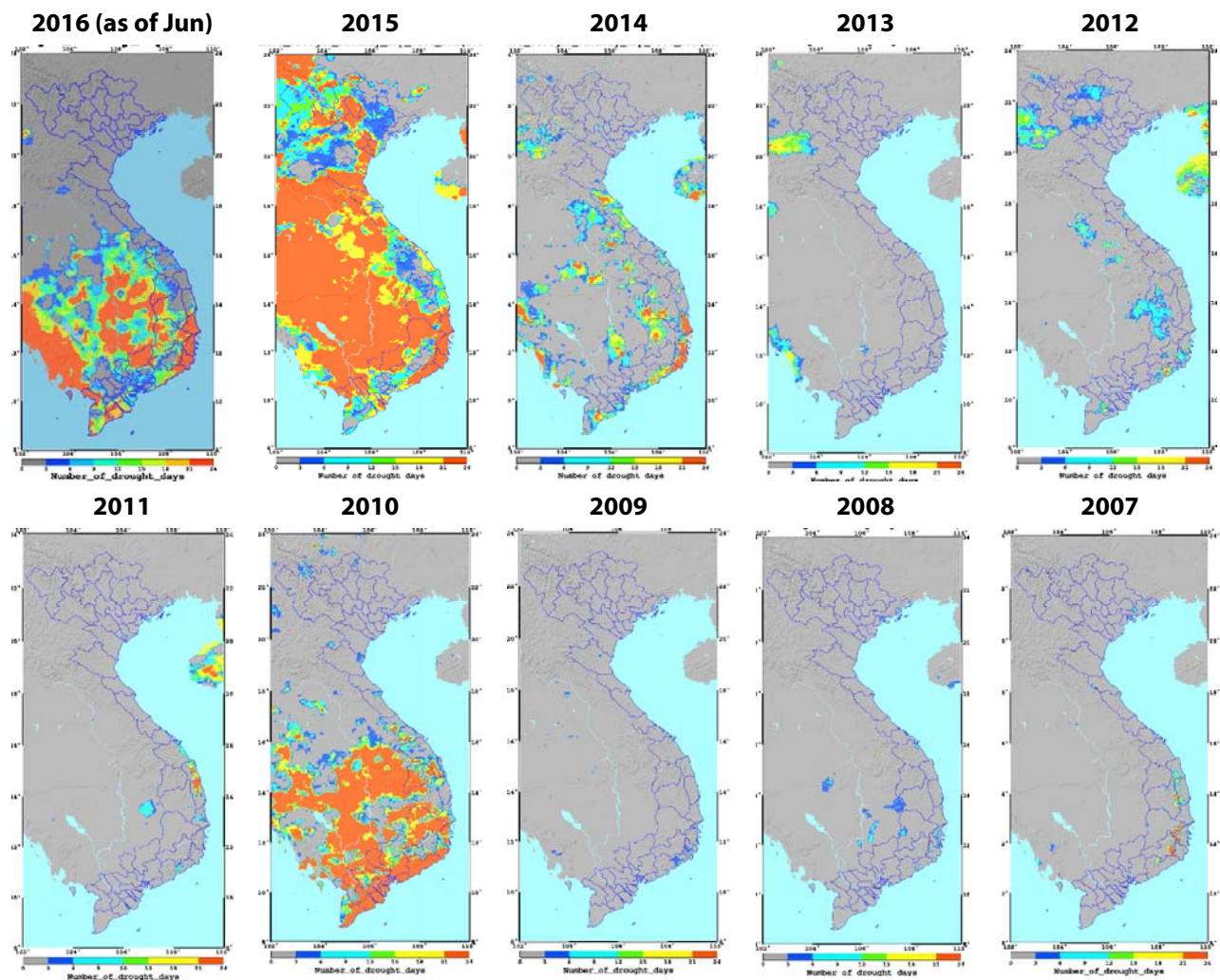
⁴ These points were based on the Cluster Working Group for Early Recovery Guidance Note 2008

- negative coping mechanisms resulting from a crisis that may perpetuate its detrimental effects or create new risks, and spontaneous initiatives that may be strengthened to rebuild livelihoods and improve security;
- an understanding of specific vulnerabilities related to gender, and the capacities of women and girls to engage in recovery;
- reliable baseline data disaggregated by sex, age, ethnicity, rural and urban, disability, etc. to feed into a comprehensive monitoring and evaluation system;
- potential secondary threats;
- and initial indications of what fundamental early recovery activities need to be undertaken now in different sectoral areas so that recovery planning and implementation can begin.

Further information on the assessment and methodology, or comments and feedback on this report can be circulated to:

Jenty Kirsch-Wood, Senior Technical Advisor Disaster Risk Management and Climate Change
jenty.kirsch-wood@undp.org

ANNEX: ACCUMULATED NUMBER OF DROUGHT DAYS ANNUALLY IN THE PAST 10 YEARS (2007-2016)



Source: IMHEN-JICA-UNDP - <http://dubaokhinhau.vn/DMEWS/>

