

VANUATU: POST-DISASTER NEEDS ASSESSMENT EXECUTIVE SUMMARY

A. Executive Summary

1. Between March 12 and 14, 2015, Tropical Cyclone Pam struck Vanuatu as an extremely destructive Category 5 cyclone, with estimated wind speeds of 250km/h and wind gusts that peaked at around 320km/h. At approximately 11 p.m. local time, the center of the cyclone passed east of Efate Island, which is home to the capital city of Port Vila, and then continued southward, passing just west of Erromango Island and Tanna Island.

2. Severe and widespread damage was worst on the larger islands of Tanna, Erromango, and Efate, while there was less damage on the smaller islands of Aneityum, Aniwa, and Futuna in the southern region. Eleven fatalities were subsequently confirmed in Tafea and Shefa Provinces. An estimated 65,000 people were displaced from their homes. Approximately 17,000 buildings were damaged or destroyed, including houses, schools, clinics, and other medical facilities. The tropical cyclone destroyed crops on a large scale and compromised the livelihoods of at least 80% of Vanuatu's rural population.

3. The total economic value of the effects caused by Tropical Cyclone Pam was estimated to be approximately VT 48.6 billion (US\$449.4 million). Of this, VT 29.3 billion (US\$270.9 million) is attributable to damage, and VT 19.3 billion (US\$178.5 million) is attributable to loss. This is equivalent to 64.1% of the gross domestic product (GDP) in Vanuatu,¹ giving an indication of the scale of impact (see Table 1).² Because of data limitations, however, it is likely that these figures underestimate the total impact. Despite highly commendable efforts by the Post-Disaster Needs Assessment team to collect data during the short time frame of this assessment, the team faced difficulties, as in many instances data were either not available or had not yet been processed. Accordingly, this assessment is not a full assessment of total damage and loss, but is rather based on the best available information at the time of writing.

4. Tropical Cyclone Pam produced different effects across the different economic and social sectors. The sectors that sustained the highest level of damage were the housing sector, which accounts for 32% of the total damage costs, followed by the tourism sector (accounting for 20% of all damage), the education sector (accounting for 13% of all damage), and the transport sector (accounting for 10% of total damage). In contrast, the largest level of economic loss is expected in the agriculture and tourism sectors, which are estimated at 33% and 26% of the total losses respectively. In addition, the environmental sector suffered significant losses to ecosystem services, although these losses are not accounted within the impacts to GDP.

5. While the destruction of physical assets by the cyclone occurred in March 2015, production losses and associated higher costs of production will linger for some time. The negative impact of the disaster on overall economic conditions in the country will thus be felt for several years to come.

6. Analysis shows that 69% of the disaster effects fall within private enterprises and individual ownership, while the remaining 31% of effects are within public sector ownership. This breakdown provides guidance on the sharing of responsibilities during recovery and reconstruction. The government is expected not only to take care of the issues that fall within its purview, but also to exercise leadership and guidance in relation to the private sector, with special reference to

¹ The 2013 nominal GDP was VT 75.8 billion, according to the Vanuatu National Statistics Office.

² All data shown in tables and figures are from the PDNA teams unless otherwise noted.

addressing the post-disaster requirements of the poor and those at risk of impoverishment.

7. Damage was the greatest in Shefa Province, whereas expected losses are the greatest in Tafea Province. Total damage and losses are estimated at VT 31.9 billion (66% of the total) for Shefa Province, VT 10.3 billion (21%) for Tafea Province, VT 3.0 billion (6%) for Penama Province, and VT 2.9 billion (6%) for Malampa Province (see Figure 1).

Table 1. Summary of Disaster Effects by Sector

	Disaster Effects			Share of Disaster Effects		Lost Personal
	Damage	Losses	Total	Private	Public	VT
Productive Sectors	8,526	10,403	18,928	98	2	1,607
Agriculture	1,421	4,641	6,062	93	7	227
Commerce and Tourism	1,196	2,152	3,348	100	0	487
	5,908	3,610	9,518	100	0	983
Social Sectors	14,339	630	14,969	67	33	–
Housing (Private)	9,452	440	9,893	100	0	–
Health	870	107	977	1	99	–
Education	3,908	79	3,987	0	100	–
Culture	109	3	112	100	0	–
Infrastructure	6,403	2,926	9,329	51	49	–
Transport	3,017	2,137	5,155	43	57	–
Public Buildings	532	12	544	0	100	–
Water	414	284	697	63	37	–
Energy	179	106	285	100	0	–
Communication	2,261	387	2,648	67	33	–
Cross-Cutting	0	5,328	5,328	0	100	–
Environment	0	5,328	5,328	0	100	–
Grand Total	29,268	19,286	48,554	69	31	1,607

Figure 1. Combined Damage and Loss by Province

B. Summary of Macroeconomic Impact Assessment

8. The overall macroeconomic impact assessment of Tropical Cyclone Pam includes revised projections for GDP, as well as an updated monetary, fiscal, and balance-of-payments outlook. The effect on GDP has been calculated using the existing baseline forecasts, which have been modified to incorporate the estimated losses and reconstruction needs as identified by each sector. Given that Tropical Cyclone Pam struck during the first quarter of 2015, a large proportion of the losses will be felt this fiscal year, with much of the recovery and some reconstruction activity also due to occur in 2015. The remainder of the reconstruction activities are anticipated to be completed during 2016 and 2017.

9. The losses resulting from Tropical Cyclone Pam are estimated to reduce GDP growth by 5.5 percentage points relative to the 2015 pre-cyclone forecast, bringing the growth rate down to -0.9% and representing a significant slowdown to the Vanuatu economy in 2015. However,

taking into account the effect of recovery and reconstruction, GDP growth in 2015 is estimated to be 1.4%. The positive growth figure reflects the scale of the reconstruction activities expected to take place in 2015 and beyond. Thus the GDP growth rate is expected to accelerate in 2016 and 2017, with the majority of activities anticipated to take place in 2016.

10. The forecast for inflation in 2015 has been revised upward from 3.1% to 3.6%, reflecting the expected increase in the prices of food and housing materials and increased reconstruction activities, particularly in the short term, as well as the expected increase in liquidity associated with the release of significant payments to Vanuatu National Provident Fund members and monetary easing measures.

11. It is anticipated that the performance of the balance of payments will be affected by exports declining relative to pre-cyclone levels. This will be somewhat moderated because the provinces that provide the majority of cash crop exports were less affected by the cyclone, while imports are expected to rise due to increased demand for reconstruction materials. Tourism earnings are expected to be dramatically affected, with most major hotels closing their doors for three to six months. Cash grants and aid in kind are anticipated to increase significantly compared to previous years.

12. There will be a number of impacts on the government's fiscal balance. In order to support reconstruction efforts, value-added tax and duty exemptions were introduced in the hardware and agricultural supplies sector on March 14 for a three-month period. This is expected to support reconstruction efforts to the value of VT 145 million. Additionally, the government has spent VT 242.3 million from its VT 248 million Emergency Relief Fund in supporting the immediate humanitarian response. Furthermore, line ministries have redeployed funds from their 2015 budgets for recovery activities, and these will have to be replenished.

13. General budget support from the European Union totaling VT 359.6 million, as well as a VT 202.0 million insurance payout from the World Bank, has been released into the recurrent budget for financing recovery-related expenditures. At the same time, grant funding for cyclone recovery operations equivalent to VT 667.4 million has been received from donors. Furthermore, estimates of recovery and reconstruction needs in the public sector will have to be accounted for as additional expenditures for 2015 and beyond.

C. Human and Social Impacts

14. Tropical Cyclone Pam affected communities and individuals in a number of ways that will require support, intervention, and monitoring. The cyclone has seriously harmed the livelihoods of over 40,000 households, severely limiting their capacities to generate income and resulting in losses of around VT 1.6 billion in personal income (see Table 1). Tropical Cyclone Pam also extensively damaged or destroyed community infrastructure, disrupting daily life and—at a time when incomes have been lost—requiring extra expenditures to pay for repairs or replacement.

15. Low-income individuals and those depending on subsistence livelihoods are suffering in the post-disaster period due to reduced incomes and food sources. Among all agricultural households located in disaster-affected provinces, 50% have lost all or part of their crops, and they will require support in the short term to meet minimum needs. The impact on subsistence farming, in which women feature prominently in the division of labor, means that the ability of women to generate income to provide food, nutrition, and other basic needs for their families has significantly decreased. Enabling households to recover their productive

and income-generating activities and increasing the resilience of livelihoods to future shocks must be a key component of the reconstruction and recovery process.

16. The destruction of critical infrastructure has the potential to impact all people, but vulnerable groups in particular. Disaster events can also create new vulnerabilities by impacting employment and livelihood-generating abilities, personal safety, public health and sanitation, household efficiency, and food production. Accordingly, restoration of health facilities, water supply systems, schools, and housing is considered a priority in order to minimize the social and human impacts of Tropical Cyclone Pam.

D. Summary of Recovery and Reconstruction Needs

17. Table 2 provides a summary of the estimated costs for recovery and reconstruction. Total recovery and reconstruction is estimated at VT 34.1 billion (US\$316 million). Of this amount VT 10.3 billion (US\$95 million) is focused over the short-term (12 months to four years).

E. Way Forward

18. Going forward, there is a need to prioritize the sectors for recovery and reconstruction based on the findings of this Post-Disaster Needs Assessment and the available financial envelope. A criteria-based prioritization of recovery needs across competing intersectoral priorities will be required. The principles of prioritization would include the following:

- (i) Potential for direct and widest humanitarian impact
- (ii) Potential to generate sustainable livelihoods
- (iii) Inclusive (pro-poor and pro-vulnerable strategies)
- (iv) Balance between public and private sector recovery
- (v) Restoration and rebuilding of critical infrastructure and services

19. The recovery program, while implemented under the government's leadership, is anticipated to work in close and collaborative partnership with the private sector and civil society of the nation as a whole, and should be guided by a detailed recovery framework that incorporates consideration of the following:

- (i) The rehabilitation and financing of the public sector will come from public financing, with the support of the traditional donors of the country. At this stage it is difficult to know the amount of public resources available. Public funding will probably be a mix of grants, credits, loans, and contribution from the budget.
- (ii) The rehabilitation and refinancing of the private sector will come from savings, debt, grants, subsidies, or duty waivers. Those who can borrow from banks will be faced with repair bills and diminished income, or have extra working capital needs to fund the reconstruction. While the Reserve Bank of Vanuatu has eased monetary policy and made available short-term facilities, there is still a significant demand for funding to meet the VT 17 billion (US\$157) million shortfall on insured damage. The amount that can be supported will be a determining factor.
- (iii) Taking into account Tropical Cyclone Pam's impacts on the population and all sectors, it should be noted that some groups are more impacted than others by the associated shocks and stresses; these include youth, women in general, women heads of households, and persons living with disabilities. Other sectors and groups are less vulnerable, have more resources at their disposal, and will proceed to self-recover more easily. Therefore, government should consider strategically allocating some of its funds and those of donors to directly assist the more vulnerable groups.
- (iv) In a country as vulnerable to natural hazards as Vanuatu, which faces frequent

extreme weather events and geohazards, the longer-term reconstruction strategy should recognize the importance of strengthening resilience of communities and individuals and should seek to enhance existing coping mechanisms. There is a role to be played by the government in ensuring that individuals and communities are provided with necessary technical and social support throughout the reconstruction phase, and that the most vulnerable are targeted.