Impact of the 2015-2016 drought and frosts: an overview

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Drought and frost in PNG: 2015-2016

- Drought from April to Nov 2015
- Drought in far south until April 2016
- Repeated severe frosts (>2200 m) July 2015
- Impacts continued until early 2017
- Major drought years (since 1900): 1902, 1914, 1941, 1972, 1997 and 2015
- Overall impact less than in 1997
Dry landscape, Barola Village
Sept 2015 (R. Robinson)
Productive landscape, Barola Village, Feb. 2016 (R. Robinson)
Overview of drought impact: water

- Water shortages widespread and early
- Water for drinking and washing scarce
- Increase in labour for women and girls
- Increase in skin and internal diseases
- Many schools closed partly/completely, even where food supply was adequate
Locations where village food shortages were greatest

- Very high altitude (>2200 m) in parts of Enga, Hela, SHP and WHP provinces
- Inland Western Province, especially Nomad/Mougulu and Morehead
- Highland fringe and foothills (e.g., Huon Pen Gulf/Morobe/EHP border area, Telefomin)
- Small islands and North coast, Milne Bay
Figure 1
IMPACT OF DROUGHT & FROST ON FOOD SUPPLY IN RURAL PAPUA NEW GUINEA LATE-DECEMBER 2015
Estimates of number short of food

- Food very scarce for ca 800,000 people (Dec 2015) (12% of rural population)
- Many more people were somewhat short of food (several million)
- In mid-2016, ca 280,000 villagers still very short of food
Comparison with 1997-98

- More people impacted in 1997-98
- By Dec97, 1.2 million (40% of rural popul)
- Huge increase in rice imports in 97-98
- Not a huge increase in 2015-16
Average rice imports per person and growth trends, 1961-2016

Figure PNG 13 Average per person rice imports and growth trends by decade, 1961–2016

- 1971–1980 annual growth rate 5.2%
- 1972–1973 feast and drought
- 1981–1990 annual growth rate 1.7%
- 1991-2000 annual growth rate -0.04%
- 1997 feast and drought
- 2001–2010 annual growth rate 0.2%
- 2011–2016 annual growth rate 2.5%

Year:

Volume (kg/person/year)
Frost damage, Lower Kaugul Valley (Kud Sitango, NARI, Tambul, WHP)
Mougulu market, Western Province: no food in market, January 2016
Other impacts on villagers

- Villagers’ health (Malnutrition, malaria, diarrhoea, typhoid)
- Bush fires. Damage to houses, gardens
- Domestic food sales (espec. highlands)
- Fly River not navigable for some months
- Impact on Kiunga, Tabubil, Telefomin
- Closure of Ok Tedi mine
- Water low in Surinumnu Dam
Widespread bushfires, Sept15

Yahoma area, Kandep valley, huge area of forest and grasslands burnt (Matt Kanua)
Worried father holds his son who is very malnourished, Mougulu clinic
Food aid (large volumes)

- Western Province (Ok Tedi Development Foundation; support from Digicel; WFP; Aust DFAT, NZ government)
- Very high altitude (Enga, Hela) (4 LLGs) (UN CERF, WFP, CARE)
- Milne Bay Province (UN, WFP, Province)
Food aid (small volumes)

- GoPNG (some highlands and lowlands)
- Members of Parliament (DSIP funds)
- Provincial administration (incl. Enga Province; Milne Bay Province)
- Churches (incl. Catholic and United)
- NGOs and others
Some lessons for the future

- Villagers mostly helped themselves
- Greatest needs are in the most remote locations (little cash income; few roads)
- Development makes a huge difference
- Aspects include: cash income, market access; transport, education, health
- Press coverage matters
More lessons from 2015-16
drought and frosts

- Assessments can now be done by phone and email from Moresby and prov. capitals
- Done by WFP or a group of PNGeans
- Local assessments, census and food distribution often good
- Post-disaster recovery – key crops are corn, sweet potato, potato, pumpkin
Em tasol