



# Challenges and opportunities in mainstreaming disaster risk reduction into agriculture

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# ESCAP's strategy for mainstreaming DRR /CCA

## Analytical and normative work, intergovernmental dialogue and regional cooperation framework

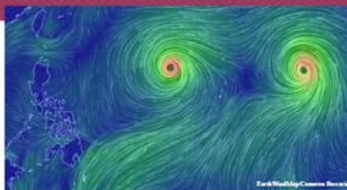
DISASTERS WITHOUT BORDERS  
Regional Resilience for Sustainable Development



Asia-Pacific Disaster Report 2015

ESCAP

Disasters in Asia and the Pacific:  
2015 Year in Review



Typhoon Haiyan approaching the Philippines in October 2013

Source: Adapted from JMA 'Yolanda' best track analysis (November 2013)

In 2015, Asia-Pacific continued to be the world's most disaster-prone region. 160 disasters were reported in the region, accounting for 47 per cent of the world's 344 disasters. The region bore the brunt of large-scale catastrophic disasters with over 16,000 fatalities — more than a two-fold increase since 2014. South Asia accounted for a staggering 64 per cent of total global fatalities — the majority was attributed to the 7.8 magnitude earthquake that struck Nepal in April which caused 8,790 deaths. Asia and the Pacific incurred more than US\$ 45.1 billion in economic damage in 2015 and even higher indirect losses. These numbers, however, are gross underestimates as there is no systematic assessment of the cost of all disasters that struck the region, especially slow-onset disasters such as droughts, heat waves, forest fires and haze.

2015 Fact Snapshot: Natural Disasters in Asia and the Pacific



Over the period of 2005-2014 in Asia-Pacific

1,625  
reported disaster  
events

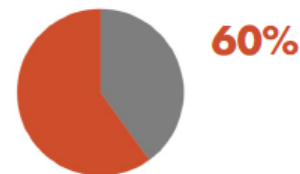
=  
accounted for



of  
 global disaster  
events

500,000  
people lost their lives due  
to disasters

=  
accounted for



of  
 global deaths due  
to disasters

1.4  
billion  
people affected by  
disasters

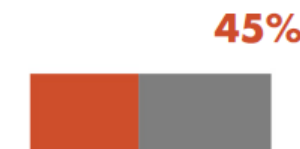
=  
accounted for



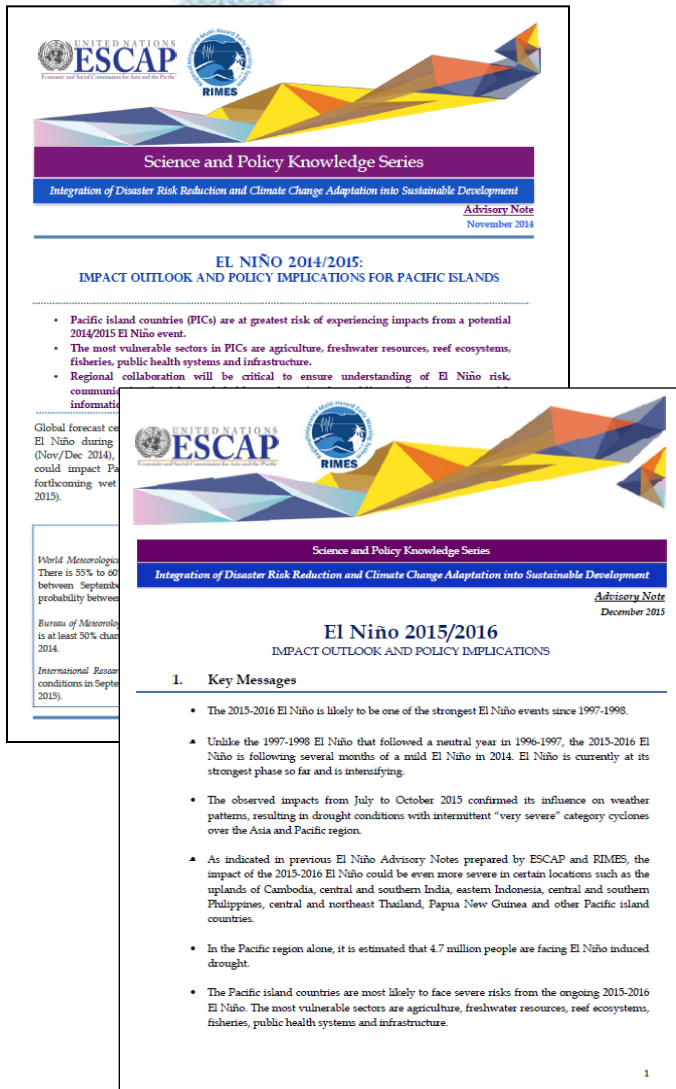
of  
 global population  
affected by disasters

US 523  
billion  
economic damage  
caused by disasters

=  
accounted for



of  
 global economic  
damage caused  
by disasters



- ESCAP's analytical work also focuses on addressing the complexities of transboundary slow-onset disasters and bridges the knowledge gaps in the region.
- The impact outlook specifically focused on assessing and communicating risks from slow onset disasters and El Niño among Pacific SIDS and facilitating timely and risk-sensitive interventions by countries
- The impact outlook provide scientifically backed risk scenarios - disaggregated at regional, sub-region and national levels as well as sector-specific risk profiles for the 2015-2016 El Niño event.

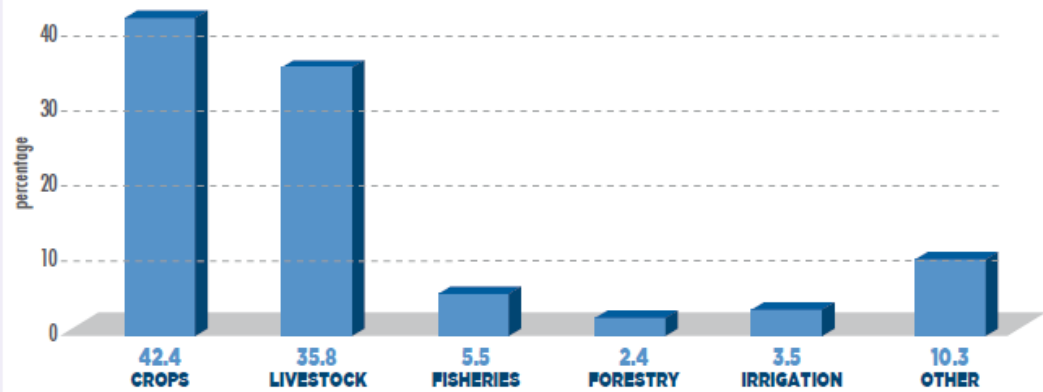


# Overview of economic impacts of disasters on agriculture

- Study by FAO, which covers 48 developing countries of Africa, Asia and Latin America (27 disaster events in 15 countries in Asia-Pacific), found that medium to large-scale disasters over the period 2003–2013 caused US\$ 30 billion-worth damage and losses on the agriculture sector out of a total of US\$ 140 billion on all sectors
- Climate-related disasters such as floods, droughts and tropical storms accounted up to 25% of all damage and losses of agriculture sector
- Almost 60% of damage and losses were caused by floods, followed by storms with 23%
- Agriculture is the single most affected sector by droughts, absorbing on average about 84% of all the economic impact



Damage and losses to the agriculture by subsector, percentage share of total



Source: FAO based on data from post-disaster needs assessments, 2003–2013

- 42% of all damage and losses is on crops (US\$13 billion), 36% on livestock (US\$11 billion).
- Asia-Pacific is the most affected region, with total crop and livestock production losses amounting to US\$ 28 billion or 40% of total.
- Disasters can change agricultural trade flows and cause losses in agricultural manufacturing subsectors such as food processing .
- The impacts of disasters can slow economic growth in countries where the sector is important to the economy. For example, in Cambodia where agriculture contributes as much as 30% to national GDP



## Damage and losses on agriculture and related infrastructure from transboundary disaster in Asia

	Sector/sub-sector	Damage, US\$ million	Losses, US\$ million	Damage and losses, US\$ million (% of total)	Recovery and reconstruction needs US\$ million (% of total)
Typhoon Ketsana, 2009					
Cambodia	Agriculture livestock and fisheries	0.09	56.42	56.51	35.0
	Water management and irrigation	2.78	0.01	2.79	3.50
	Total	2.87	56.43	59.30 (44.92%)	38.50 (30.35%)
Lao PDR	Agriculture	15.7	2	17.7	15
	Water resources	0.38	0.11	0.49	4.59
	Total	16.08	2.11	18.19 (31.29%)	19.59 (33.56%)
Philippines	Agriculture	80.1	769.2	849.3	351.3
	Flood control drainage dam management	15.3	n.a.	15.3	171.3
	Total	95.4	769.2	864.6 (19.72%)	522.6 (11.81%)



## Cumulative impacts on agriculture and related infrastructure in Pakistan

	Sector/sub-sector	Damage US\$ million	Losses US\$ million	Damage and losses, US\$ million (percentage of total)	Reconstruction needs, US\$ million (percentage of total)
2010 floods	Agriculture, livestock and fisheries	3,710	1,335	5,045 (50.16%)	1,049 (11.76%)
	Irrigation and flood management	278	-	278 (2.76%)	982 (11.01%)
	Total	3,988	1,335	5,323 (52.93%)	2,031 (22.78%)
2011 floods	Agriculture, livestock and fisheries	1,636	204	1,840 (49.30%)	306 (11.13%)
	Irrigation and flood management	55	-	55 (1.47%)	110 (4.0%)
	Total	1,691	204	1,895 (53.21%)	416 (15.14%)
2010 and 2011 floods	Cumulative	5,679	1,539	7,218	2,447



# Damage and losses of agricultural sector in PICs

	Sector/sub-sector	Damage, US\$ million	Losses, US\$ million	Damage and losses, US\$ million (percentage of total)	Recovery and reconstruction needs US\$ million (percentage of total)
Samoa, 2009 tsunami	Agriculture (crops, livestock, fishery)	5.78	8.40	14.18 ( 11.43%)	3.41 (2.05%)
Samoa, 2012 Cyclone Evan	Agriculture (crops, livestock, fishery)	2.15	25.46	27.61 (13.54%)	10.13 (4.92%)
Fiji, 2012 Cyclone Evan	Agriculture (crops, livestock, forestry)	3.72	17.31	20.95 (19.30%)	9.86 (12.26%)

预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_2611](https://www.yunbaogao.cn/report/index/report?reportId=5_2611)

