

## Two disasters affecting Garuda Land

According to local authorities in northern and southern regions of (fictional) Garuda Land, forest fires have affected the north while flooding has caused impacts in southern Garuda Land. The authorities have made some direct observations, including some estimated costs in Garudas (which is Garudaland's currency) and passed the information to you -see below.

**Problem:** Using only the below information, apply DRSF to create one or more simple tabulations and using the tables, calculate **Direct Economic Loss** from the disasters.

Forest Fires Report in N. Garuda Land: Dec. 2019		Flooding in S. Garuda Land: Dec. 2019	
The forest fires caused severe damage to a local primary forest of Garduland's national tree. Surveyors have visited the damage area and estimated number of destroyed specimens of the national trees:		Flooding in S. Garuda Land has caused disruptions due to temporary closures of critical public services like hospitals and bridges. At least 2 hospitals and bridges have been damaged. Local authorities reported damages to 140 homes and are now homeless, awaiting public relocation or to rebuild their damaged dwellings.	
<b>SEEDLINGS</b>	57,080	avg cost to reconstruct dwellings	unit no.
<b>SAPLINGS</b>	2,025,000	restore hospitals to pre-f	no.
<b>POLES</b>	642,630	avg. cost to reconstruct bridges	no.
Farmers were also surveyed and this information, combined with remote sensing imagery taken after the fires was used by an official agency to estimate the area of agricultural land damaged at		avg. cost to fix roads	km
A follow-up study by the agricultural ministry estimated that mainly 8,000 metric tonnes of crops were affected by the fires, primarily Garuda Land's two main staple crops that are currently selling on the market at 2 Garudas ( <i>Garudas are currency</i> ) per kilo.		An official estimate from S. Garuda economic bureau listed average reconstruction costs as listed above	
		Residents requested emergency government assistance to rebuild total, about 600 km of roads were by the flooding, affecting around 7 commuters, including neighboring Garuda land: 10% of the total roads damaged were actually in N. Garuda since the floods also extended to a part of N. Garuda Land.	

used local  
re of  
s, roads  
nd 2 key  
l residents  
nd dozens  
support for  
ed

Garudas

400,000

700,000

500,000

1,000

Land's

e.

l roads. In  
e damaged  
'00,000  
; N.  
ls  
ida Land  
samall part