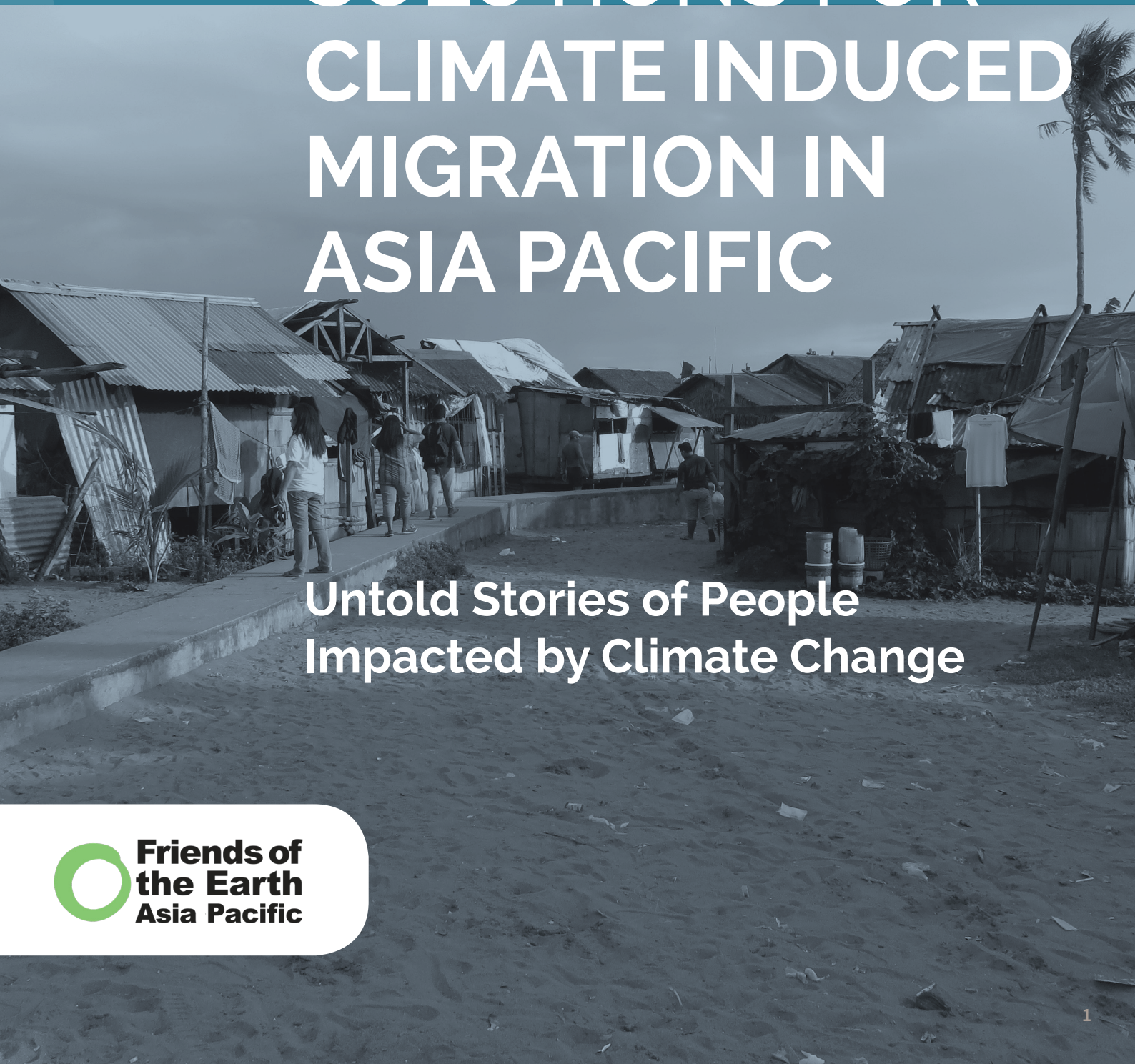
CALL FOR JUST SOLUTIONS FOR **CLIMATE INDUCED MIGRATION IN ASIA PACIFIC**



Untold Stories of People Impacted by Climate Change

Friends of the Earth Asia Pacific

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Friends of the Earth International is the world's largest grassroots environmental network, uniting 75 national member groups and some 5,000 local activist groups on every continent. With over 2 million members and supporters around the world, we campaign on today's most urgent environmental and social issues. We challenge the current model of economic and corporate globalization, and promote solutions that will help to create environmentally sustainable and socially just societies. Friends of the Earth Asia Pacific (FoE APac) is composed of diverse organisations, which range from a very small volunteer-based group (of 4-5 people) to big membership groups (of 250 staff to 90,000 members). At present, FoE APac is comprised of member organisations in Australia, Bangladesh, Japan, Indonesia, Malaysia, Nepal, Palestine, Papua New Guinea, Philippines, Russia, South Korea, Sri Lanka and Timor Leste.

This paper was produced by Friends of the Earth Asia Pacific to facilitate the discussion on the issue of climate induced migration during COP 23 which will be held in Bonn, Germany in November 2017, under the presidency of the government of Fiji.

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Executive Summary

Countries in Asia and the Pacific region are threatened simultaneously by severe floods, landslides, coastal and shoreline erosion, increasing snow, glaciers and ice melting, spreading of diseases and severe droughts due to impacts exacerbated by climate change. Further, water stress from reduced rainfall, coupled with salinity, glacial retreat and desertification will hit water stocks, threaten livelihoods, while at the same time, forcing an exponential rise in food and water prices, increasing competition and conflicts among communities for depleted resources. Meanwhile, economic impacts of climate change in the region will go beyond the agriculture sector, and could also affect industry and investments.

Projected higher temperatures are estimated to reduce the average developing Asia per capita income by at least 10% by 2100 relative to business as usual growth.[1] These impacts are already resulting climate induced migration in the worst hit communities in the region. While temporary migration is frequent, some are forced to migrate to other countries for better earnings, becoming economic migrants. However, the world is currently lacking an administrative and legal system to properly recognise and protect them.

Friends of the Earth Asia Pacific demands that governments look beyond emergency responses to climate disasters. Governments need to take a proactive approach that addresses the magnitude of the issue of climate displacement and treats impacted people with justice. The government authorities need to act in a comprehensive way to ensure that those who are forced to flee their homes and lands, are afforded the respect and protection of the full spectrum of rights enshrined within the Universal Declaration on Human Rights and subsequent human rights treaties.

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1. Asian Development Bank, July 2017.

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Climate change in the Asia and the Pacific

With more than 4.5 billion people in 2016, Asia Pacific is home to nearly 60 per cent of the world's population and many of the regions most severely affected by climate change. It is a diverse region, containing seven of the world's ten most populous countries, and some of the world's smallest island nations in the Pacific. Many of the countries in the region and our populations have thus far been adversely affected by climate change.

Under a business-as-usual scenario, a 6 degrees Celsius average temperature increase over pre-industrial times is projected over the Asian landmass by the end of the century. The average temperature increases in Tajikistan, Afghanistan, Pakistan, and the northwest part of the People's Republic of China (PRC) are projected to reach a shocking 8 degrees Celsius.[2]

Asia's low-elevation population could reach 983 million by 2060, a doubling from its level in 2000, thus accounting for 70 percent of the world's total. Asia Pacific nations are threatened simultaneously by rising sea levels, increasing snow, glaciers and ice melts, spreading of diseases and severe droughts. Elsewhere in the region, water stress from reduced rainfall, salinity, glacial retreat and desertification will hit water stocks, threaten livelihoods and drive up food and water prices. Communities in these developing countries are in jeopardy since there is an increasing gap between the insufficient supply of food, water, electric energy and the huge demand by the rapidly growing population and the lack of opportunity/environmental space for developing economies.

India, Philippines, Bangladesh, China and smaller countries such as Sri Lanka, Nepal, Palestine, Kiribati, Fiji, Vanuatu, Solomon Island, Tonga, Samoa and Papua New Guinea have suffered from concurrent weather extremes including floods, droughts, heatwaves and landslides in the past decade. Glacier lakes are being created in Himalayan regions of Nepal posing a threat of displacement of population in lower region due to imminent threat to thousands of people living in lower areas.[3] According to the International Federation of the Red Cross and Red Crescent Societies (IFRC), significant floods in 2017 have affected more than 7.4 million people in Bangladesh, destroying more than 697,000 houses.[4] In August 2017, floods killed 514 people in India's eastern state of Bihar, where 17.1 million people have been affected. In the northern state of Uttar Pradesh, about 2.5 million people have been affected.[5] Just in May 2017, landslides in Sri Lanka had killed more than 200 people.[6]

Climate induced migration in Asia and the Pacific

Growing climate extremes and livelihood losses have already led to temporarily displaced communities, mostly in the rural sector. Temporary displacements are common during floods. However, permanent losses of properties due to floods, landslides and coastal erosion, leads to permanent displacements. Some people migrate to other countries for economic reasons while the poorest usually become refugees in their own land.

In 1990, the Intergovernmental Panel on Climate Change (IPCC) noted that the greatest single impact of climate change could be on human migration—with millions of people displaced by shoreline erosion, coastal flooding and agricultural disruption. Since then various analysts have tried to put numbers on future flows of climate migrants (sometimes called 'climate refugees')—the most widely repeated prediction being 200 million climate induced migrants by 2050 globally.

Asia is considered the most at-risk continent, given its low-lying coastal regions and the density of the population in the region. Among those facing a severe shortage of water would be those living downstream of the Himalaya-Hindu Kush mountain range that would altogether put around 39 – 812 million South Asians at risk of water stress. Climate migrants from Bangladesh alone would, in all probability, outnumber the current number of refugees worldwide[7].



Village elders walking towards that mangroves that are planted in empty 200 litres drum to stop raging waves from destroying their village shorelines.



The future of this young Pere islander is in limbo

2. Asian Development Bank, July 2017
3. https://www.theguardian.com/environment/2011/oct/10/glacier-lakes-melt-himalayas
4. https://www.theguardian.com/world/2017/aug/30/mumbai-paralysed-by-floods-as-india-and-region-hit-by-worst-monsoon-rains-in-years.
5. http://www.straitstimes.com/asia/south-asia/death-toll-in-floods-in-eastern-indian-state-of-bihar-hits-514
6. https://www.theguardian.com/global-development-professionals-network/gallery/2017/jun/04/sri-lanka-worst-floods-mudslides-since-2003-in-pictures

Case Study #1:
Drought impacted Anuradhapura, Sri Lanka

Kusumawathie (39) is a mother of three children who lives in Anuradhapura in the dry zone in Sri Lanka. Her husband is a kidney patient. He was a farmer before he became sick. They have not been able to farm since March 2016 due to the drought. She had no other option and decided to temporarily migrate to Middle East as a domestic helper.



Figure 1: Women in Madirigiriya, Polonnaruwa, collecting muddy water for drinking (source: Karu Gamage, Madirigiriya)

According to the UN, several suicides have been directly attributed to the effects of this drought.[8] As of 19 September 2017, the Disaster Management Centre (DMC) in Sri Lanka has estimated 1.9 million people to be affected by drought across 17 districts. Since late 2016, Sri Lanka has been experiencing a lack of rainfall in what is believed to be the worst drought in 40 years, with significant impacts on the lives and livelihoods of communities.

The production forecast for 2017 would be sufficient for only 7 months of household consumption. As a result, over 300,000 households are estimated to be food insecure with many households limiting their food intake and in some cases eating just one meal a day. The inability of farmers to cultivate their lands has also resulted in decline of agricultural work and, consequently, indebtedness is rising in drought affected communities. 50% of households surveyed in a recent World Food Programme assessment reported that their debts have almost doubled compared to 2016 due to a lack of agriculture based income.

Meanwhile, in May 2017 the wet zone in Sri Lanka flooded and more than 500,000 people were displaced. Landslides killed more than 200 people[9]. According to the Department of Agriculture, due to the floods in May and ongoing drought impacting the primary and secondary harvests of 2017, the rice production for 2017 is expected to be the lowest in the last 10 years.

People being affected by droughts, floods and landslides are on the rise every year recently . More and more people like Kusumawathie are either internally displaced or temporarily migrate to other regions like the Middle East. They are not able to receive a good salary due to language barriers and lack of educational qualifications. Meanwhile the children suffer from malnutrition, sexual harassment and mental illness amongst other effects induced by changing climate and climatic disasters. These social problems are now attributed to the climate crisis.

7. http://colombogazette.com/2017/09/19/several-suicides-attributed-to-effects-of-drought-in-sri-lanka/
8. see footnote 4

Figure 2: Men and Women in Kabithigollewa, Anuradhapura waiting for the dry rations (Source: President Media News)



Case Study #2 :

Sea level rise impacted Pere Village, Manus Province, Papua New Guinea

The changing climate has significantly affected the way of life for the villagers of Pere in Manus Province in Papua New Guinea. It is highly likely that they would run out of their traditional food source and freshwater for sustenance; and would have to migrate elsewhere because of the rising sea level and the subsequent destruction of coastal villages.

Mr. Chokal Manuai, the Chairman of Pere Alalau Association's Environment and Climate Change Committee says "our entire lifestyle depends on the sea, and changes in wind direction in recent times have affected the number of fish caught for that particular time of the year as compared to the past"[10].

Pere is a coastal island village that lies close to mainland Manus and is situated 25km from the provincial capital, Lorengau with a total population of 1,030 people of the Titan ethnic group. Pere Village sits on an island that is bounded by extensive fringing coral reefs, facing seaward, while the mangroves surround the part facing mainland Manus.

The swampy estuaries are areas where the villagers gather mud-crabs, fish, clamp shells and other marine products. The mangroves provide timber for housing and are breeding grounds for mud-crabs and other wildlife. The island is made up of limestone outcrops and limited areas are suitable for food crop planting. There are no major agricultural activities. Therefore, the villagers depend entirely on marine resources for their sustenance and exchanges with inland people [11].

For Pere village, the changes in the westerly wind direction during certain times of the year have affected their fishing season where certain species of fish could no longer be caught. The strong winds have either made it too risky to go fishing or the species are no longer present in the area.

Moreover, erosion of the coastal shoreline is another phenomenon experienced by the Pere community. Shoreline erosion is directly induced by sea level rise and coastal flooding. The Climate Change and Development Authority (CCDA) emphasizes that it is a serious and irregular phenomenon that has a strong relationship to climate change [12].

The shoreline erosion poses threats to cultural and sacred sites in Pere. The cemetery in Pere village is already at a high tide level and would soon be washed away by the continuous impact of the high tides. The high tide has further led to the erosion of the beach front where village houses are on the verge of being washed away. This change has been experienced for the last fifteen years.

The villagers have tried their best to build a seawall with bush material to protect the beach and planted mangroves to stop the cemetery from being inundated by seawater.

The rising sea level has also affected coastal food production areas. This is synonymously referred to as reduction of agricultural yield by the CCDA and the World Bank [13]. In the coastal areas, an inundation of saltwater has affected the production of sago [14] and other root crops. The saltwater also affects freshwater resources that include aquatic habitats, fish production and the water supply for households. They can no longer get fresh water from their wells.

The Pere people are already losing their natural support system. They will soon lose their customary lands. They may have to or be forced to become climate migrants to the main island.



Figure 4. A cemetery in Pere village is already at the high-tide zone, threatened by the rising sea level. (Source: Peter Bosip, July 2011)



Figure 5. An example of a seawall built with local materials to prevent erosion (photo: Peter Bosip, July 2011)

10.Pokakes, July 2011: pers.comm

11. Demerath, P. (1999). The Cultural Production of Educational Utility in Pere Village, Papua New Guinea. Comparative Education Review, 43(2), 162-192.

12. CCDA. (2010). Enhancing adaptive capacity of communities in Papua New Guinea to climate change and disaster risks in the Coastal and Highlands regions (U. N. D. Programme, Trans.) (pp. 31).

13. World-Bank. (2010). Reducing the Risk of Disasters and Climate Variability in the Pacific Islands: Papua New Guinea Country Assessment.

14. Sago is the starch extracted from the spongy centre, or pith, of various tropical palm stems, especially that of Metroxylon sagu. It is a major staple food for the lowland peoples of New Guinea.

Case Study #3:

Climate induced cultural and economic displacement of Philippine indigenous communities

Due to food scarcity in his village, caused by the negative impacts of El Niño, Oscar Guiaman, an indigenous community member went hunting on February 7, 2016 together with another indigenous person (IP), Arnel. After 2 days of hunting in the forest, Arnel decided to go home while Oscar chose to stay, waiting for a chance to get wild pigs or deer. He never returned home. There were rumors that Oscar's body was found by neighbors. Investigation on the incident is still ongoing. But the struggle of the communities for survival has led to unfortunate events such as this. Climate vulnerability and the struggle for food security is one concrete impact of climate change, like El Niño, and its effect on food security can be found at Sitio Mari, Ahan Guindulungan, Maguindanao where Oscar lived.

The Philippines, considered as an agricultural country, is highly dependent on the different elements needed for food production – land, water, air and the environment in general. Due to the advent of climate change and extreme weather events, rice and agricultural production cycles have been affected, and has ultimately impacted on the lives and livelihood of farmers and rural communities.

With the advent of a more severe El Niño in 2015/2016, indigenous communities who depend on farming for their sustenance and livelihoods have experienced economic and cultural displacement. The drought brought about by El Niño in indigenous communities in South Cotabato, in Mindanao (southern part of the Philippines) has impacted the communities' food sovereignty. The prolonged drought led the Tedurays and Lambangian tribes, who are primarily farmers both for sustenance and for livelihood, to experience poor harvests and crop failure. Subsequently they were unable to pay off the creditors for their farm inputs. The communities likewise observed that their farm animals have stunted growth. This resulted to community indebtedness and hunger. This food insecurity has resulted in petty theft of livestock and other properties.

In 2016, LRC/FoE Philippines and its community partners in Maguindanao provided support relating to the dry spell that plagued the communities in the area. The dry spell started since the last harvest season of 2015, around September to October of 2015. The second cropping during the normal planting season is supposedly October to November. However, the crop yield was severely affected during those cropping seasons due to the drought, which resulted in no harvests in December 2015 to January 2016. Even as late as March 2016, the land preparation for the regular planting season from March to May of 2016 did not happen. The effect is an impending food crisis: no more seeds to plant, work animals are sold, community members looking for jobs elsewhere resulting in disruption in family relationships.

With dwindling resources, communities' diets comprise of the remaining reserve corn stocks (which pests also attack), cassava root crops and *karot* or wild poisonous yam (in a way that it is safe to eat). No other produce can survive the dryness of the land.

With no other crops to plant, women's role in budgeting and looking for resources has become critical. Women are the ones who budget resources. With no fields to work on and without other alternative livelihood skills, the only other option that is readily available is to become domestic helpers. Thus, women are compelled to take on jobs that take them away from their homes and families. In interviews, community respondents have noted an increase of those, mostly women, who have migrated to the city centers or even abroad, to work as domestic helpers.



Drought-affected agricultural lands along the main highway in Upi, Maguindanao, Philippines
Photo by Ana Rhia Muhi (LRC/FoE Philippines)

Children are the most vulnerable, however. While parents make sure that children are fed first before themselves, the remaining resources and the feeding programs sponsored by local government units are not enough to ensure that they are getting the proper nutrition. Parents are likewise forced to remove their children from school or not enroll them in the coming school year.

The extreme weather events due to climate change have not only resulted in disruption to the food security of the indigenous communities, but have also exacerbated dangers in their social, environmental, political and security related situation.

Recommendations

People who are worst affected by climate change are those that are the poorest and most marginalised or vulnerable communities. They are the least responsible for causing the climate crisis but feel the brunt of its impacts in a disproportionately high manner.

Meanwhile, multinational corporations and developed nations and governments have contributed the most to and benefited from fossil fuel emissions and have an undeniable moral obligation to play a leading role in establishing, implementing and financing a framework that encompasses climate change mitigation, adaptation and proactive management of climate induced migration.

The loss of territories, statelessness and the redefining of borders will undoubtedly carry heavy political implications for many nation-states in the region. Although legal frameworks, both at the national and international levels, have so far failed to recognize the existence of climate refugees, the conditions which exacerbate this migration continue almost uninhibited.

As the cases from three countries in this report show, the people who migrate in the face of climate disasters have little to no recourse. The economic, social and cultural impacts for these people are not their own fault, but the symptoms of a crisis that rich nations and corporations are responsible for. Failures of the governments and multilateral institutions to adequately support communities and their rights and develop their resilience against climate change are also a contributing factor to this climate induced migration and displacement.

Friends of the Earth Asia Pacific calls on all governments and inter-governmental institutions to:

- **Develop** policies, strategies and practical programmes that mitigate the worst effects and consequences of climate change on affected populations, and enable and empower such populations to adapt to changing environmental factors in a proactive way, in full partnership, cooperation and free prior and informed consultation with vulnerable people and communities affected by climate;
- **Ensure** that all persons and communities affected by climate induced catastrophes, in particular those who are forced to flee their homes and lands, are afforded the respect and protection of the full spectrum of rights enshrined within the Universal Declaration on Human Rights and subsequent human rights treaties;
- **Develop** local, national, sub-regional, regional and international plans and policies to ensure respect for and protection of the rights of climate induced migrants;
- **Develop** an inter-governmental framework on resettlement to cater for the specific and unique situation of persons, communities and states affected by climate induced catastrophes and the slow onset of environmental degradation;
- **Undertake** immediate measures to identify available land and other appropriate resources for the purposes of relocating and resettling all forced climate migrants, both those displaced internally as well as those likely to seek resettlement in other countries;
- **Carry out** intensive free prior and informed public consultations with the communities affected and will be affected by rising sea levels or other consequences of climate change, with a view to developing viable and practical plans to protect the rights of forced climate migrants, in particular their housing, land and property and other related rights;
- **Devote**, where mitigation and adaptation responses are likely to be insufficient per se, adequate resources, in particular, financial resources, to practical measures designed to assist climate induced migrants to relocate and resettle in a manner consistent with their rights and in ways that secure for them an adequate standard of living and sustainable livelihoods;
- **Explore** creative and innovative methods of identifying long-term relocation and resettlement options for forced climate migrants, consistent with their housing, land, property and related rights, whilst preserving their dignity as human beings;
- **Establish** clear protocols for states whose entire populations will have to relocate to another jurisdiction to retain their sovereignty and sovereign rights over their original territorial entity;
- **Develop and support** projects that demonstrate an alternative economic model reflecting values of: justice, equity, and sustainability – in challenge to the values inherent in the neo-liberal economic model dominant in the world today;

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Cover Image: