



Permanent Mission
of the Republic of Indonesia to the UN, WTO,
and Other International Organizations
in Geneva

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The Permanent Mission of the Republic of Indonesia to the United Nations, WTO, and Other International Organizations in Geneva presents its compliments to the Office of the High Commissioner for Human Rights and with reference to the letter from the UN Special Rapporteur on the Right to Adequate Housing calling for **'inputs on adequate housing as a component of the right to an adequate standard of living,'** has the honour to convey information regarding the situation of the right to adequate housing and climate change in Indonesia.

The Permanent Mission of the Republic of Indonesia to the UN, WTO, and Other International Organizations in Geneva, avails itself of this opportunity to renew to the Office of the High Commissioner for Human Rights the assurances of its highest consideration.

Geneva, 29 July 2022



**UN Special Rapporteur on the right to adequate housing
Special Procedures Branch
Office of the High Commissioner for Human Rights
Geneva**

**Report of the UN Special Rapporteur on the right to adequate housing to the
52nd session of the Human Rights Council
The right to adequate housing and climate change
Questionnaire**

Name of submitting entity, organization or individual: _____

Contact e-mail: _____ (contact e-mail will be deleted when published)

Impact of climate change on the right to adequate housing

In real life

1. In your country, what have been the main effects of the climate crisis, on the enjoyment of the right to adequate housing? Please specify whether there have been any climate-induced impacts on the security of tenure, availability, affordability, accessibility, habitability, location and cultural adequacy of housing, including climate crisis related displacement.

Answer

Indonesia is vulnerable to the impacts of climate change, especially those that are caused by rising sea levels and inundation due to flooding in coastal areas or tidal waves. This is a reality faced by Indonesia as an archipelagic country. As a result, people living in the areas prone to floods and landslides are at heightened risk of losing their houses and land because of the climate crisis. In addition, natural disasters due to climate change also have an impact on the amount of land that can be used for housing. The areas that are relatively safer are getting more limited, therefore it affects the affordability of housing especially for low-income people.

Based on the Environmental Statistics, the highest number of natural disasters in 2020 was flooding, which reached 1,080 cases in 2020.

Table 1. Number of Natural Disasters

No	Natural Disaster	Year 2020
1	Landslide	577
2	Flood	1080
3	Drought	29
4	Forest and Land Fires	326
5	Tornado	880
6	Tidal Wave/Abrasion	36

Source: Statistics Indonesia (*Badan Pusat Statistik / BPS*), Environmental Statistics 2021

The disasters caused casualties, injuries and material losses (people were affected and needed to evacuate). Based on these data, flooding is a disaster that causes the largest number of affected and displaced households reaching over 5.1 million victims.

Table 2. Number of Victims Caused by Natural Disasters

No	Disaster Type	Death Casualties	Injuries	Affected and Evacuated
1	Landslide	125	109	31,689
2	Flood	262	282	5.101.113
3	Drought	0	0	1,607,870
4	Fire Forest Land	0	4	7
5	Tidal Wave/Abrasion	0	0	2,954

Source: BPS, Environmental Statistics 2021

Specifically, climate change has a major impact on the settlements in the northern coastal part of Java Island, where most of the large cities are located. For example, Jakarta with a population of 10.6 million people experiences annual flooding and tidal flooding which is exacerbated by land subsidence (between 2-10 cm per year) caused by groundwater extraction, overuse and loss of green belts on the coast. In addition, other cities such as Semarang, Demak and Pekalongan in Central Java also experience a decrease in ground water level between 3-4 cm per year. These conditions (especially floods, tidal waves and abrasion) have impact on the people's livelihoods in many sectors.

- Are there differences how the climate crisis affects the right to adequate housing in urban and rural areas? If yes, is there an interrelationship between the two?

Answer

Climate crisis affects people living in urban and rural areas differently. This is mainly because of the population density factor. Urban areas have a higher density of settlements which causes the impact of floods and tidal waves to be more severe. These impacts include uninhabitable houses and limited access to drinking water and sanitation. In terms of relocation at times of disaster, it is relatively easier for communities living in the rural areas to be relocated because there is more land available for relocation than in urban areas.

- Are there groups distinctly affected in the enjoyment of their right to adequate housing as a result of the climate crisis? Please describe in what way.

Answer

As an archipelagic country, Indonesia has 514 districts facing the threat of hydrometeorological disasters due to climate change, such as floods and droughts. Groups whose rights to adequate housing are significantly affected by the climate crisis are:

- a. Communities in coastal areas that are vulnerable and exposed to the risk of tidal flooding and sea level rise, one of which is on the north coast of Jakarta and Halura Island, East Sumba, East Nusa Tenggara. Based on USAID data in 2017, there are about 42 million people living in lowlands <10 masl. People in this area are very vulnerable to sea level rise. Based on BPS Marine and Coastal Resources Statistics 2020 data, there were 1,685 seaside villages (13.1%) affected by tidal waves in the 2016-2018 period;
 - b. Communities on the riverbanks are vulnerable to the risk of flooding. There are 14,078 villages throughout Indonesia which have settlements in riverbanks area (BPS, 2018).
4. How is the right to adequate housing ensured for persons that have been internally or internationally displaced by the climate crisis? How and under what conditions is their right to voluntarily return ensured?

Answer

The Government of Indonesia through the Ministry of Public Works and Housing conducts intensive coordination with regional governments and the National Disaster Management Authority (*Badan Nasional Penanggulangan Bencana / BNPB*) in addressing the housing sector after natural disasters.

The Government establishes classification of damaged houses: lightly damaged (LD), moderately damaged (MD) or heavily damaged (HD), so enable the government provide appropriate and targeted treatment.

The Government emphasizes the importance of single data on handling houses damaged by natural disasters so that the Government can immediately distribute aid according to what is truly needed by the community. The Ministry of Public Works and Housing in 2021 has launched the Disaster Affected Houses Data Collection Information System (“Rutena”) application to help people whose homes are affected by natural disasters. This system aims to immediately stock take data on houses affected by disasters and increase the effectiveness of distributing assistance.

Regional governments in Indonesia are tasked to be constantly ready to provide extra protection for citizens who are affected by natural disasters. Provision and rehabilitation of decent houses for victims of natural disasters are mandatory, both at the provincial and district/city levels. This has become part of the basic services regulated in the Minimum Service Standards in the Public Housing sector under the Minister for Public Works and Housing Regulation No. 29/2018.

For low-income community in particular, the Government provides temporary and permanent relocation for people affected by natural disasters, although, on occasions, budget constraints become an obstacle in the provision of such housing. A recent example of relocation service for victims of climate-related natural disaster is the provision of temporary housing and building of new permanent housing – carried out by BNPB, the Ministry of Public Works and Housing, and the North Sulawesi Provincial Government – for victims who lost their house due to abrasion in Amurang Beach, North Sulawesi in June 2022.¹

¹ Devi Ramadhan and Uyu Liman, “BNPB to relocate people affected by abrasion in S Minahasa”, *Antara News* (25 June 2022), <https://en.antaranews.com/news/236081/bnpb-to-relocate-people-affected-by-abrasion-in-s-minahasa>.

5. When housing has been damaged or lost due to climate-induced events, what has been the related impact on the lives, health and livelihoods of the affected populations?

Answer

Climate change will indirectly have an impact on people's lives in the form of loss or change in people's livelihoods, especially people who live on the seashore. Loss or damage to housing caused by climate change will also have an impact on the quality of people's lives. These are some of the examples:

- a. People whose houses are submerged by floods/tidal floods are difficult to get access to clean water;
- b. Houses are damaged and uninhabitable because of the floods;
- c. The affected people must be reallocated to temporary shelter with a limited area of living;
- d. The reduced availability of clean water and sanitation also affects public health.

Based on a study by the Indonesian Ministry of National Development Planning, Indonesia's macroeconomic losses on 4 (four) priority sectors, namely marine and coastal, water, agriculture, and health due to the climate crisis are estimated at 102.3 trillion rupiah in 2020 (approx. 6.8 billion USD) and 115.4 trillion rupiah in 2024 (approx. 7.7 billion USD), or an increase of 12.75% over five years.

6. How have people been able to access redress and compensation for damages to or loss of their housing as a result of the climate crisis and extreme weather events? What are the main obstacles to accessing timely redress and compensation, and what could be effective solutions?

Answer

To gain access to compensation for damage or loss of houses as a result of the climate crisis, an inventory/data collection of damage or loss of houses due to the climate crisis and extreme weather is carried out by the Regional Government alongside National Disaster Management Authority (BNPB). There are 3 (three) classifications of house damage due to disasters: heavily damaged (HD), moderately damaged (MD), and lightly damaged (LD) with data on the name and address of the owner of the house. The appropriate Regent/Mayor is mandated to issue Decree (SK) for the residents affected by the disaster that will need to be attached to a letter of application for funding to BNPB and related agencies such as the Ministry of Public Works and Housing. The assistance can be in the form of materials and houses. The main obstacle to accessing timely compensation is the long data verification process and replacement land prepared by the local government that takes time.

7. Please indicate any key rulings of national courts and tribunals protecting tenants and home owners from the impact of the climate crisis or on their right to adequate housing or related to climate induced displacement? Please also describe their outcome and impact?

Answer

To our knowledge, cases concerning the climate crisis, right to adequate housing, or climate induced displacement have not reached the national courts thus far.

However, the Indonesian national legal system does provide an avenue for citizens to bring a civil claim arising out of violation of their rights (including environmental rights and right to adequate housing) through several mechanisms: a class action, citizen lawsuit, or public interest litigation.

8. Please explain how energy efficiency, green urban planning, climate mitigation and adaptation policies and programmes take into account the right to adequate housing. What measures have been taken to ensure that they do not have any (unintended) discriminatory impact on particular population groups?

Answer

Policies and programs related to energy efficiency, green city planning, mitigation, and climate adaptation in Indonesia have no discriminatory aspect. The Government does not prioritize particular population groups, except the Low-Income Community. Housing-related policies indeed tend to prioritize the handling of the Low-Income Community groups, as mandated in Law Number 1 of 2011 on Housing and Residential Area, Low-Income Communities are people who have limited purchasing power, therefore they need to receive government support to get proper housing.

Steps that have been taken to ensure that these policies and programs do not have a discriminatory impact include:

- a. At the time of policy formulation, the Government inclusively involve the parties affected by the policy;
 - b. Prior to the policy formulation, a mandatory Strategic Environmental Study should be carried out. It should assess not only the environmental impacts, but also the social and economic impacts;
 - c. In the policy implementation process, the Government is open for *ex ante* policy evaluation.
9. Please explain how natural disaster preparedness, response and recovery/reconstruction strategies and plans ensure non-discrimination?

Answer

To ensure non-discrimination to certain community groups during the disaster recovery/reconstruction period, governance is carried out by prioritizing accountability and transparency. The strategies being implemented are, first, in the data collection, data verification, and construction process, all relevant parties and related stakeholders are involved in an inclusive manner to ensure no discrimination. Second, building a complaint mechanism, for the public to file complaints if there are violation of rules/regulations and discriminatory acts.

10. What are the main barriers to addressing and mitigating the adverse impacts of climate change on the realization of the right to adequate housing?

Answer

- a. Limitations and differences in the authority of the central, provincial, and regional governments in providing housing for people affected by disasters due to climate change;
- b. Challenges in ensuring adequate budget allocation to provide adequate housing, including for those affected by climate change;
- c. Difficulties in compiling accurate and systematic databases and information in the housing sector at central and regional levels.

Impact of housing on climate change

11. How does the housing sector in rural and urban areas contribute to climate change? It may be helpful to think in terms of:

- energy consumption for heating, cooling, cooking, lighting of housing;
- urban sprawl and related climate impacts (soil sealing, commuter traffic etc.);
- increase of average per capita living space;
- water use;
- emission of pollutants;
- climate impact of construction and used construction materials;
- deforestation, desertification and loss of biodiversity caused by housing development projects.

Please provide as well any statistical information on the climate impact of the housing sector compared to other sectors in your country.

Answer

The housing sector's contribution to Indonesia's annual greenhouse gas (GHG) emissions in 2019 is recorded as follows:²

- Conversion of land from non-settlement into settlement areas → 60.330 Gg CO₂e (2,32% of Indonesia's total annual GHG emissions)
- Unmanaged solid waste disposal → 38.540 Gg CO₂e (1,48% of Indonesia's total annual GHG emissions)
- Residential energy consumption → 25.700 Gg CO₂e (0,99% of Indonesia's total annual GHG emissions)
- Domestic wastewater → 23.862 Gg CO₂e (0,92% of Indonesia's total annual GHG emissions)

While the data for GHG emissions contributed by rural and urban housing is not segregated, the difference in the lifestyles of rural and urban communities may indicate higher energy consumption in urban areas to be larger than in rural areas.

12. What measures are being implemented in rural and urban areas to reduce and eliminate the adverse impacts of the housing sector on the climate? How successful have been these programmes?

Answer

Several measures have been implemented to reduce the impacts of the housing sector on the climate, such as:

- Ensure the process of land conversion for the housing sector is carried out in accordance with planning documents by considering the Regional Spatial Plan, Detailed Spatial Planning, and other binding documents or regulations.
- Promote the construction of vertical housing or flats to minimise land conversion for settlement areas.
- Applying the concept of green building in every development, starting from the selection of building materials used, green house designs, and building management. For example, the Indonesian Government is implementing a pilot project in Palembang, South Sumatra, to develop subsidised housing with green building standards at an affordable cost. The building design applies environmentally friendly principles with an estimated 31% energy saving, 21% water saving, and 49% less embodied in material. This pilot project is in the process of obtaining the EDGE Green Certified Level 1 certification.

² Ministry of Environment and Forestry of the Republic of Indonesia, *Green House Gas Inventory Report and Monitoring, Reporting, Verification 2020* (February 2021), http://ditjenppi.menlhk.go.id/reddplus/images/adminppi/dokumen/igrk/LAP_igrk2020.pdf, 54.

Positive progress has been achieved in implementing these measures. For example, in 2019, it is reported that green development in several cities in Indonesia has increased to cover 25 million square meters, which was estimated to potentially reduce 1 million metric tons of CO₂ emissions.³ Another example comes from a housing development project implementing green measures in Banten, Indonesia, that successfully achieved a 30% utility savings per year for its residents.⁴

13. What are the main barriers to reducing and eliminating the adverse impacts of the housing sector on the climate?

Answer

The main barriers to mitigating the housing sector's adverse impact on the climate are, among others:

- a. Limitation in terms of price and availability of affordable technology to implement green building;
- b. Varying degrees of knowledge among stakeholders involved i.e regional governments, property developers, and consumers regarding the implementation of green building policies;
- c. The assumption of stakeholders in the housing sector (developers, communities and local governments) that the construction of houses with a green concept is complicated so that it requires greater costs, particularly in the process to obtain a green building certificate.

Towards a just transition to a rights-compliant, climate-resilient and carbon-neutral housing

14. What specific legislation, policies, or programmes have been adopted to put in place and finance a just transition to a rights-compliant, climate-resilient and carbon-neutral housing for all, without discrimination?

Answer

Regulations, policies, or programs relating to climate-resilient housing

- Minister for Public Works and Housing Regulation No. 11/PRT/M/2012 on National Action Plan for Climate Change Mitigation and Adaptation 2012-2020

Regulations, policies, or programs relating to carbon-neutral housing:

- Minister for Public Works and Housing Regulation No. 02/PRT/M/2015 on Green Building
- Minister for Public Works and Housing Regulation No. 21/2021 on Green Building Performance Assessment

Regulations, policies, or programs relating to rights-compliant and non-discriminatory housing:

- Government Regulation No. 42/2020 on Accessibility in Housing, Public Service, and Disaster Mitigation for Persons with Disabilities
- Minister for Public Works and Housing Regulation No. 20/PRT/M/2019 on Home Ownership Assistance for Low Income Community

³ Made Anthony Iswara, "Indonesia Makes Good Progress in Green Building", *Jakarta Post* (9 December 2019), <https://www.thejakartapost.com/news/2019/12/09/indonesia-makes-good-progress-green-building.html>.

⁴ International Finance Corporation, *Green Buildings: A Finance and Policy Blueprint for Emerging Markets* (Washington DC: International Finance Corporation, 2019), 19.

15. What measures have been taken to ensure that the costs of green transition in the housing sector are fairly shared between public authorities, taxpayers, homeowners, and tenants/renters or other affected interest groups, and to ensure the continued affordability of housing?

Answer

The Indonesian Government has enacted several policies to support the affordability of housing and green transition in the housing sector. For example, the Minister for Public Works and Housing has issued Regulation No. 20/PRT/M/2019 on Home Ownership Assistance for Low Income Community. Furthermore, the Ministry of Energy and Mineral Resources provides incentives for the installation of solar panels for households, businesses and SMEs, social and educational institutions, hospitals, and places of worship.

16. What adaptation strategies are needed to ensure the continued habitability of housing in the face of the climate crisis? (protection from e.g. heat, flooding, extreme weather, etc.)

Answer

Examples of adaptation strategies that are needed, which Indonesia has been implementing and encouraging as well, are as follows:

a. Climate adaptation strategies for new housing projects include:

- i. In terms of selecting the location, housing development is carried out in areas that are not prone to disasters and are not green open spaces or protected areas;
- ii. Paying attention to the suitability of land use in accordance with spatial planning; and
- iii. Using a nature-based approach to develop home designs that are adaptive to the surrounding environment.

b. For existing housing/settlement, the adaptation to reduce the risk of climate change is conducted by developing public infrastructure to minimise the impact of climate-induced disasters, such as expanding piped water network to reduce groundwater extraction and slowing down land subsidence, revitalising the drainage system to minimise flood risk, as well as building dikes and polders to prevent flooding from the sea.

17. How are different interest groups, including marginalized communities, homeowners and tenants, being consulted, and able to participate in the design, implementation, monitoring and evaluation of:

- legislation, policies, or programmes been adopted that provide for specific measures to ensure the realization of the right to adequate housing in the face of the climate crisis;
- natural disaster preparedness, response and reconstruction, as well as in mitigation and adaptation efforts;
- measures to reduce and eliminate the adverse impacts of the housing sector on climate.

Answer

In drafting laws, policies, or programs - including those relating to climate change mitigation and adaptation - public consultations are conducted prior to the enactment of laws to obtain inputs regarding the needs and opinions of the community. For example, in the settlement improvement program in Indonesia, community meetings constitute an important stage in the planning and decision-making process of the project. This community participation is necessary so that the project implementation can also address actual problems faced by the community.

18. What is the role of international cooperation, technology transfer and development assistance of States and multilateral agencies to ensure a just transition?

Answer

Technical and financial assistance from international institutions supports the development and implementation of technologies and policies for a green transition that is just and affordable. Such international collaboration also provides support for States to develop evidence-based policies as well as performance monitoring and evaluation framework.

Examples of international cooperation schemes for green transition in Indonesia are as follow:

- a. The International Finance Corporation (IFC) and Indonesia's Ministry of Public Works and Housing have been working together since 2015 to develop green building codes in Indonesia.⁵ More recently, the IFC also assisted the construction of environmentally friendly subsidised housing in Gandus Land City housing complex in Palembang, South Sumatra.
- b. The Green Climate Fund (GCF) is a funding mechanism under the United Nations Framework Convention on Climate Change (UNFCCC), providing financial support for developing countries such as Indonesia to achieve their emission reduction targets. The Fiscal Policy Agency under the Ministry of Finance functions as the National Designated Authority between Indonesia and the GCF. One of the strategic impact areas financed by the GCF is infrastructure and the built environment.

19. What are the main barriers to achieving such a just transition?

Answer

The main barriers to achieving an equal transition are, among others:

- a. Limitations and differences in the authority of the central, provincial, and regional governments in providing housing for low-income communities;
- b. Challenges in ensuring adequate budget allocation that are appropriate to the targets that have been set for housing projects;
- c. Difficulties in compiling accurate and systematic databases and information in the housing sector at central and regional levels.

Other issues

20. Please use this space to indicate any issue that should be considered for this report.

⁵ Ibid.