**Response of the Government of Nepal**

**On**

 **the adverse impact of climate change on the full realization of the right to food**

1. **Please describe through concrete examples and stories how climate change is affecting the full realization of the right to adequate food in your country.**

Nepal is one of the most vulnerable countries to climate change due to its fragile geography, agriculture-dependent livelihood, and weak adaptive capacity. Nepal’s susceptibility to climate change has several adverse implications on people’s socio-economic activities and their livelihoods. In the rural areas of Nepal, agriculture is the main source of income. It highly relies on small-scale, rain-fed agriculture and dry-land farming where productivity is impacted by climate change. Depending on the weather pattern, even small and short-period weather extremities badly affect food production and supply. The scarcity of surface and sub-surface water for irrigation during non-monsoon seasons combined with flood damages to the arable lands in summer adversely affects winter crop production. Affected by other anthropogenic factors including deforestation, faulty agricultural practices, and insufficient strategies to cope with climate change livelihood of the people is aggravated.

A recent report suggests that about 90% of crop loss in Nepal can be attributed to weather or meteorological events, increased temperature, and climatic hazards such as erratic rainfall, droughts, and floods triggered by them (VRA/MoFE, 2021). Climate change induces about 10% to 30% losses in the production of crops, livestock, and fisheries combined. The decline in yield and production results in poor availability and access to food, which leads to food insecurity and poverty. Food insecurity and poverty have impacts on the full realization of the right to food.

Moreover, the infestation of crops by pests is another concern around food security in Nepal. The Climate Survey carried out by the Central Bureau of Statistics in 2017 revealed that 60.25 percent of households observed the emergence of new plant diseases and 66.09 percent observed the appearance of new insects/pests in crops, while 45.98 percent of households observed the appearance of new diseases in livestock. The invasion of hyacinths in the Beeshazari Lake in Chitwan district and Phewa Lake in Kaski district, created a threat to the tropical and sub-tropical wetlands. The Giant African Land Snail *Lissachatina fulica*, among the first invasive species that entered the Southern part of Nepal in the Eastern Region, is found in high densities in Beltari, Kushma, Pokhara, Damauli, and Bharatpur in the districts of Syangja, Parbat, Kaski, Tanahun and Chitwan respectively.

Data on the adverse impact of climate change;

A. Major crop loss caused by drought between 1972-2015[[1]](#footnote-1)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S. N. | Drought year | Causes of drought | Major crop loss (in Metric tonnes) | Affected regions |
|  | 1972  | Late onset of monsoon/rainfall | 333,380 | Eastern and Central |
|  | 1976 | Poor distribution of rainfall | 218,480  | Western |
|  | 1977 | Late onset of rainfall | 322,320  | Eastern and Central |
|  | 1979 |  Late onset of rainfall | 544,820  | Western |
|  | 1982 | Late onset of rainfall | 727,460 | Eastern |
|  | 1986  | Poor distribution of rainfall during August and September | 377,410  | Western |
|  | 1992  | Late onset of rainfall | 917,260  | Eastern |
|  | 1994 | Poor distribution of rainfall  | 595,976 | All regions |
|  | 1997  | Poor distribution of rainfall  | 69,790  | Eastern |
|  | 2002  | Poor distribution of rainfall  | 83,965  | Eastern and Central |
|  | 2008  | Poor distribution of rainfall during November 2008 to February 2009  | 56,926  | All regions |
|  | 2009  | Late-onset of monsoon  | 499,870  | Eastern and Central |
|  | 2012  | Summer monsoon late-onset and long dry spell  | 797,629  | Eastern and Central |
|  | 2013  | Inadequate rainfall that affected rice plantation  | 56,000  | Eastern and Central Terai districts |
|  | 2015  | Delayed monsoon and weak at the onset, which delayed paddy transplantation  | Not available  | Eastern Terai |

B. Area (in hectares) of crops affected by climate-related extreme events in Nepal[[2]](#footnote-2)

|  |  |
| --- | --- |
| Crops |  Year |
| 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Paddy | 115,000 | 6,967 | 116,506 | 3,585 | 120,000 | 88,800 | 30,873 | 92,000 |
| Maize | 4,435 | 954 | 1,293 | 20 | 47 | 4,271 | 549 | 1,700 |
| Millet | - | - | 500 | 419 | - | 1,451 | 3 | - |
| Others | 2,067 | 611 | - | - | - | - | 324 | - |
| Total | 121,502 | 8,532 | 118,299 | 4,024 | 120,047 | 94,522 | 31,749 | 93,700 |

**2. Please describe any specific measure, including public policies, legislation, practices or strategies that your government has undertaken, in compliance with applicable international human right law, to promote an approach to climate change mitigation and adaption, as well as loss and damage that ensures the full and effective enjoyment of the right to food. Please also note and identify any relevant mechanisms for ensuring accountability for these commitments including their means of implementation.**

Article 36 of Constitution of Nepal ensures every citizen’s right to food, the right to be safe from the state of a life threat from the scarcity of food, and the right to food sovereignty in accordance with the law. Article 30, the right to a clean environment, provides that every citizen shall have the right to live in a clean and healthy environment and for any injury caused by environmental degradation, the victims shall have the right to obtain compensation, in accordance with the law.

Article 51 (e), policies relating to agriculture and land reforms states, inter alia, to make land management and commercialization, industrialization, diversification, and modernization of agriculture, by pursuing land use policies to enhance agriculture products and productivity, while protecting and promoting the right and interests of the farmers, to make proper use of lands, while regulating and managing lands on the basis of productivity, nature of lands and ecological balance; and to provide for the farmers' access to agricultural inputs, agro products at fair price and market. Article 51 (h), policies relating to the basic needs of the citizens, has provisions for sustainable production, supplies, storage, security, and easy and effective distribution of foods by encouraging food production corresponding with climate and soil conditions. It is in consonance with the concept of food sovereignty while also enhancing investment in the agriculture sector. The Constitution directs the State to pursue a policy to make an advance warning, preparedness, rescue, relief and rehabilitation in order to mitigate risk from natural disasters.

**Sustainable Development Goals (SDG), 2016-30**

Nepal is committed to ending hunger, achieving food security and improved nutrition and promoting sustainable agriculture, and taking urgent action to combat climate change and its impact as provided in the United Nations Sustainable Development Goals. The Government of Nepal (GoN) has mainstreamed the SDGs into national development plans and implemented them through long-term and short-term programs. SDGs are now being localized.

**15th Periodic Plan (2019/20-2023/24)**

The fifteenth Plan has specified the transformation of subsistence agriculture into a competitive and commercial one as a challenge for industrial development and climate change adaptation action to reduce the energy crisis and possible disaster for socio-economic development efforts. This plan has adopted a strategy to develop and disseminate climate-smart agriculture technology to reduce the negative effect of climate-induced disasters.

**Seed Vision (2013-25)**

The Seed Vision aims to increase crop productivity, raise income and generate employment opportunities through self-sufficiency, import substitution, and export promotion of quality seeds and contribute to biodiversity conservation.

**Land Use Policy, 2015**

This policy was formulated to manage safe settlements from natural disasters after the devastating earthquake in April 2015. The strategies and objectives of this policy are to ensure food security, increase agricultural production and productivity through conservation and best utilization of agricultural land, biodiversity and environmental conservation, and reduction of climate change impacts and natural disasters.

**National Climate Change Policy, 2019**

Nepal formulated a targets-based National Climate Change Policy in 2019 to address climate change impacts, and help develop people's coping capacities. It has the policy to improve food security, nutrition, and livelihoods by adopting a climate-friendly agriculture system. The government has designed the following strategies and working policies for this national policy:

 (a) Agriculture-based adaptation programs will be conducted by targeting poor, marginalized, landless, indigenous people and vulnerable households, women and persons with disability.

 (b) Agricultural crops suitable for dry and waterlogged areas will be identified and promoted.

(c) Technologies that protect crops from climate-induced disasters like drought and cold waves will be developed and expanded.

(d) Water-efficient irrigation technology will be promoted.

(e) Crop diversification, protection of agricultural biodiversity and the organic farming system will be promoted.

 (f) Crop diversified kitchen gardens or home gardens will be developed in households of rural areas in view of nutrition security.

(g) Agroforestry with species of multipurpose trees in uncultivated agricultural land will be developed and promoted.

(h) Risk of adverse impacts likely to result from climate change will be analyzed while preparing the land use plan of the agricultural area.

(i) Traditional knowledge, skill, and practice, as well as innovative technologies related to the climate-friendly agricultural system, will be documented, promoted, and expanded.

(j) Provision will be made for disseminating prior information to farmers relating to weather through agricultural extension programs.

 (k) Low carbon emission and energy-efficient technologies will be promoted for production, collection, processing, and storage in the agriculture and animal husbandry sector.

 (l) Provision will be made for climate-induced disaster (risk) insurance in the agriculture and animal husbandry sector.

**Zero Hunger Challenge (ZHC) National Action Plan (2016 - 2025)**

The country adopted ZHC initiative as a national agenda with a vision to prepare a National Action Plan to eradicate hunger by 2025. The Ministry of Agriculture and Livestock Development prepared a roadmap to launch the Zero Hunger Challenge initiative and formulated the National Action Plan for ten years from 2016 to 2025. The overall objective of the Action Plan is to ensure “right to food” by improving the food and nutrition security of people and making society free of hunger and malnutrition by 2025. This action plan emphasizes fostering right-based access to food and its proper utilization. Its specific objectives are, *inter alia*, to strengthen sustainable production processes for accelerated growth of the agriculture sector; improve the food and nutritional status of all people in the country; and improve the social protection system for the poor suffering from hunger, poverty, and malnutrition.

**Nepal's National Adaptation Program (NAP)**

NAP includes adaptation actions that are best able to address climate vulnerabilities and risks in the short (2025), medium (2030), and long term (2050); as well as adaptation actions contributing to the achievement of national economic and development priorities. NAP has identified the "Programme on Sustainable Agriculture, Food and Nutrition Security, and Climate Resilient Health and Hygiene" as one of the prioritized programs. Implementation of priority programs is necessary to achieve Nepal's ambitious goal to ensure the protection of all vulnerable people from climate change by 2030. Full implementation of NAP is critical in building climate-resilient Nepal.

**4. Please describe any mechanisms and tools that are in place to measure and monitor the impacts of climate change on the full realization of the right to food.**

Various legal, programmatic, and institutional measures are set up to reduce the risks of and vulnerabilities to climate change that hinder the realization of the right to food.In addition, to the constitutional and legal measures mentioned above, National Climate Change Policy in 2011 and its amendment in 2019, Nepal's Long-Term Strategy for Net-Zero Emission, Nepal's Second Nationally Determined Contribution (NDC), National Adaptation Plan for Nepal (2021 -2050) are some of the major policy initiatives undertaken by Nepal. The National Climate Change Policy (2019) identifies eight thematic areas and four cross-cutting areas which are impacted by climate change, and agriculture and food security is one of the important sectors.

The Ministry of Forests and Environment regularly carries out research on the impact of climate change. A recent study on Vulnerability and Risk Assessment (VRA) has identified adaptation options in the Agriculture and Food Security sector. The VRA report establishes a baseline for climate change impacts, risks, and vulnerabilities in this sector in Nepal. The report also offers a range of adaptation options for reducing root causes of vulnerability and risk.

National Disaster Risk Reduction and Management Authority has a mandate to coordinate with ministries, departments, academic institutions, international agencies, and other stakeholders on activities related to multi-hazard risk assessment, risk communication, and disaster risk reduction. Risk data, information, and data on hazards, exposure, and vulnerability are compiled and shared in open-source formats to help key development sectors, and provincial, and local governments make decisions about risk management.

Department of Water Resources and Irrigation is responsible for conducting and coordinating all flood risk assessments in Nepal. Likewise, the Department of Forests and Soil Conversation uses satellite imagery to manage forest fire observations. Similarly, the provincial government and rural and urban municipalities have designed and implemented various programs to address the impact of climate change on the right to food.

There is also a provision for carrying out an Environment Impact Assessment and Initial Environmental Examination before the commencement of any projects in the Environment Protection Act, 2019. Agroforestry and private forest development programs have also played a remarkable role in carbon sequestration and climate change adaptation. The Nepal National REDD Strategy has been introduced to reduce greenhouse gas emissions from deforestation and forest degradation.

**5. Please identify and share examples of promising practices and challenges in the promotion, protection, and fulfillment of the full realization of the right to food in the context of the adverse effects of climate change.**

**6. Please include examples and promising practices and challenges that highlight international and multilateral cooperation and approaches that promote the full realization of the right to food.**

The global food system is directly connected with the production, availability, and accessibility of food. Several reports reveal that the global food system is exceeding ecological limits while failing to meet the food needs of a large segment of the world’s population and climate change is acknowledged as one of the prominent reasons for this. Absence of uniformity in understanding the multi-sectoral issues of climate change among the inter-sectoral agencies, lack of coordination, lack of studies, research, and basic data about the impacts of climate change effect and potential loss or damage resulting from climate-induced disasters, failure to mainstream the climate change issues into the overall development process are some of the problems and challenges seen in the climate change management. This requires international and multilateral cooperation approaches to promote the full realization of the right to food in the context of the adverse effects of climate change. In order to address the long-term impact of climate change on agriculture and food security actions that directly or indirectly hamper the genetic diversity of food production should be halted. Transfer of new technologies and practices such as disease-resistant and climate stress-tolerant crop varieties, new machinery is needed in processing and refining agricultural productions. Quality data management and sharing, grants, subsidies, and technical assistance should be provided to developing countries for climate change adaptation.

GoN remains constructively engaged with international mechanisms to address the adverse effects of climate change in the context of fulfilling the right to food. For example, the Ministry of Forest and Environment and the United Nations World Food Programme, with the financial support of the Adaptation Fund, have jointly implemented "Adapting to Climate Change Induced Threats for Food Security and Food Production in the Karnali Region of Nepal (CAFS Karnali)" project during 2018 - 2022 with the objective of increasing the adaptive capacity of climate-vulnerable and food insecure poor households by improving the management of livelihood assets and natural resources in seven rural municipalities of Jumla, Kalikot, and Mugu districts.

1. Vulnerability and Risk Assessment and Identifying Adaptation Options, Sectoral Report, Agriculture and Food Security, p. 17 [↑](#footnote-ref-1)
2. Vulnerability and Risk Assessment and Identifying Adaptation Options, Sectoral Report, Agriculture and Food Security, p. 18 [↑](#footnote-ref-2)