

FINAL REPORT PROJECT

Development System for Mainstreaming Climate Risk Management Learning Tools Focusing on Losses and Damages (L/D) Framework and Materials

Agreement number : 81270365
Project Processing number: 13.9757.9-002.00
Period : 01.04.2021 to 30.06.2021
Extend Period : 01.07.2021 to 31.07.2021

1. Introduction

The Government of Indonesia (GoI) already paid attention to climate change in the last two decades. The GoI through the MoEF has submitted the Initial National Communication (INC) document to UNFCCC in 1999, the Second National Communication (SNC) in 2010 and the Third National Communication (TNC) in 2016. The GoI has also been committed to strengthen the country's strategy for addressing climate change issues by ratifying Paris agreement in 2016 through Law No.16/2016. Recently, the GoI has submitted a document of National Determined Contribution (NDC) to the UNFCCC in the late of 2016 and the updated version in the middle of 2021.^{1,2} The GoI has also been developing NDC Roadmap as a strategy to achieve the targets that have been planned in the NDC document.³ These pro-active actions are endorsed the commitments to reduce climate change risks on key development sectors as documented in many official documents (ICCSR, 2010; SNC, 2010; RAN-API, 2014, and Country Report, 2017).

In the NDC document, specifically on adaptation aspects, the target is to reduce risks on all development sectors by 2030 through local capacity strengthening, improved knowledge management, convergent policy on climate change adaptation and disaster risk reduction, and application of adaptive technology. The goals are to build resilience and increase adaptive capacity to manage the risks in achieving economic, social and livelihood resilience, as well as ecosystems and landscapes.¹ Also, literacy and knowledge management on climate change are encouraged to contribute in achieving the national targets on climate change adaptation as committed in the NDC. The identification carried out in the NDC Roadmap estimates that the projected of projected climate change (2021-2050) has a median value of 2.87% GDP.³ To address the potential impact, the NDC roadmap has also proposed eight strategies to implement the NDC commitment. One of the strategies is to enhance the country capacity in Climate Literacy.

As the implementation from the previous cooperation with GIZ, we have developed several learning materials related to L/D issue including: webinars, module, book reference, presentation, video, infographic, curriculum, and technical brief. These modalities we achieved from previous activities as well as cooperation need the further steps in advancing and mainstreaming the developed learning tools that focus on L/D as part of climate risk management. Understanding the government's commitment, education on climate change subjects is an essential component. Public and/or community, especially young generation, should be equipped with necessary knowledge and skill on how to adapt with the new climate regime. To achieve the targeted objectives, the development of virtual learning tools on L/D as part of climate risk management is needed to be developed. These initiatives will develop an LD e-learning system portal that can store all materials related to L/D, as well as to disseminate the materials to be accessed by anyone and anywhere. In addition, the portal is

¹ MoEF. 2016 The first Nationally Determined Contribution of Indonesia.

² http://ditjenppi.menlhk.go.id/reddplus/images/adminppi/adaptasi/dokumen/Updated_NDC.pdf

³ http://ditjenppi.menlhk.go.id/reddplus/images/adminppi/adaptasi/dokumen/Roadmap_NDC_API_opt.pdf

also targeted to provide information on LD monitoring in Indonesia. This initiative is also in line with the efforts of Gol, which has made efforts to reduce losses due to disasters through the implementation of a disaster curriculum in formal education in schools and the development⁴ of platforms used for the development of contingency plans in order to reduce potential losses and damages⁵.

2. Objectives

The main objective of the project is to advancing and mainstreaming the developed learning tools that focus on L/D as part of climate risk management. The objectives are targeted to be useful for at least but not limited to the following main targeted users:

- Students who learn about L / D material
- Trainers or practitioners from local community or experts
- Government related to climate change management and disaster risk management
- The coverage of the target area is not limited to beneficiaries in Indonesia, but also designed to be accessible within the ASEAN region

3. Approach and Method

In order to achieve the objective, the following activities performed by producing output products, (1) Development of a conceptual system portal; (2) Development of databases and content systems, mainly required information and content for the LD monitoring articles, etc.; (3) Dissemination and training of LD portal, either through direct or indirect learning schemes (competition to learn literacy losses and damage). Each task contains a specific activity to provide the required output as illustrated in Figure 2.

(1) Conceptual system portal development;

The team conducts an internal meeting to design and plan the outcomes to be conveyed. The task 1 is directed to design required steps for designing the database components and graphical user interface (GUI) to be included in the strategic and operational dashboard database. Hence the material could be accessed easier by several interested learners, practitioners and the wider public from Indonesia and beyond.

(2) Development of database and content system;

The activities grouped in Task 2 will collect all the material developed, including the material in the last cooperation with GIZ. The material will be integrated into the Portal system, hence it becomes a digital material that can be accessed and downloaded by the audience. Additional material that can support and relate to LD will also be included. In addition, LD portal content will also be enriched from the results of competitions and mini surveys conducted in the context of socializing this portal. A mini survey was developed in order to assess the literacy status of target beneficiaries regarding L/D and CRM.

(3) Dissemination and training of portal LD

Task 3 is designed as a continuation of task 1 and 2 to increase the capacity of targeted users in knowing the concept of LD through LD Portal. After the construction of the online tool was completed, socialization was carried out through student competitions and training.

⁴ <https://bnpb.go.id/uploads/24/siaga-bencana/buku-pembelajaran-spab-indo.pdf>

⁵ <http://inasafe.org/>

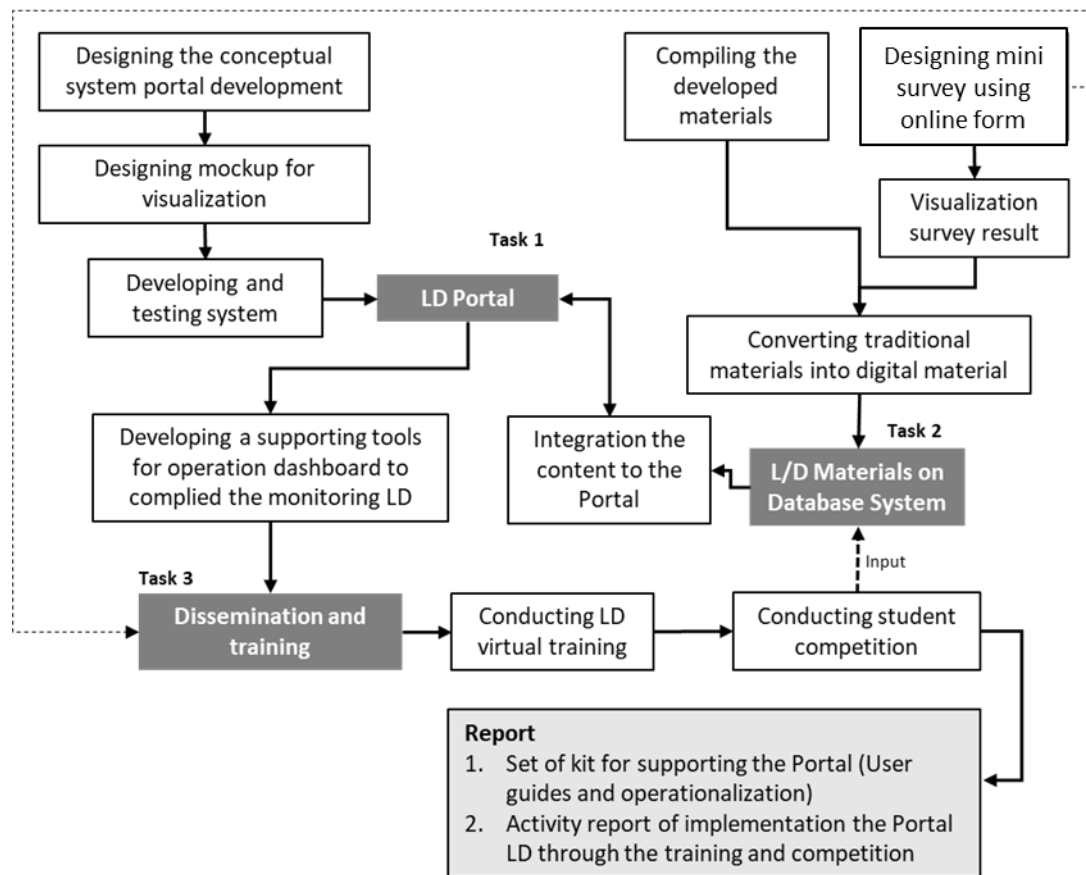


Figure 1 Work Flows of designed activities to produce the targeted output

To complete the product output according to the working period, the team has collaborated with various parties. The team considers inputs, suggestions, and reviews from stakeholders including experts from universities, central government, and researchers / professionals / practitioners. The team conducts internal meetings to design and plan the output products to be delivered. The main reference in compiling the output of this period is the material that has been produced in the previous cooperation period. The team did sound and asked for support from various parties in order to get more participants and also beneficiaries. Activities to generate outputs are illustrated in Figure 1. All resources involved in the project are based on outputs and products as planned in the proposal. Resources involved include project staff, external experts, media consultants, and costs of other activities such as meetings and procurement.

4. Output and Implementation

During the contract period, we develop the output as proposed in the proposal. In General, the output consists of (a) LD online portal, (b) Public literacy survey on the issue of L/D and climate change, (c) Student competition, (d) Trainings & Workshops. This output undergoes slight modifications that need to be done because it adapts to the situation and conditions, including due to the Covid-19 pandemic. However, this does not detract from the essence of the main goal of advancing and mainstreaming L/D materials. An example of the modifications we made was the introduction/use of the Portal. Instead of holding a special training to explain various features in the portal (including the e-learning feature), we voiced portal information in various opportunities, for example in discussions with the government, community online activities, and classroom learning. In addition, we also include brief information in emails to partners. In this way, it can spread information to a wider audience. The various outputs produced are summarized in Figure 2.

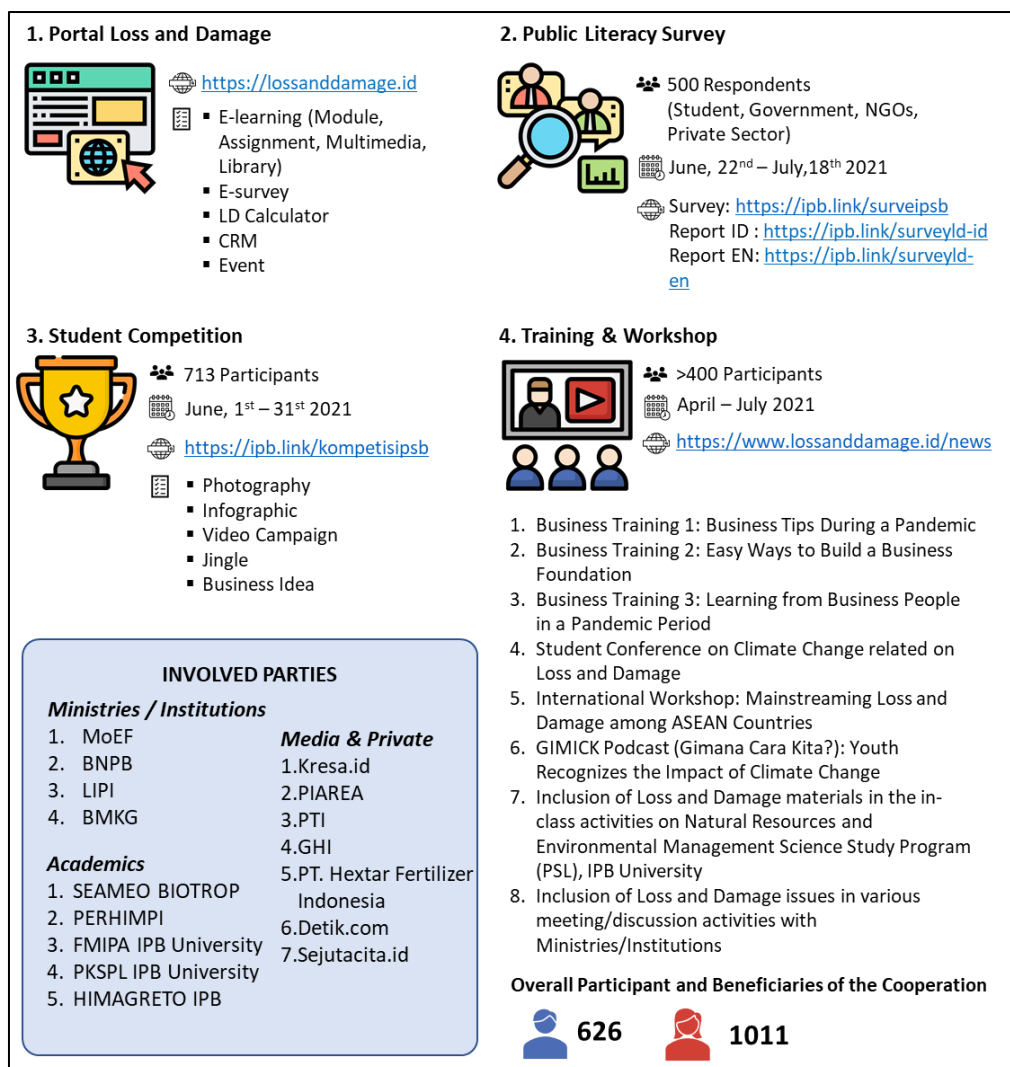


Figure 2 Product output in the first period of cooperation

The process of expanding the output impact of this work can be divided into technical and theoretical processes. Technically, the work is designed to produce several outputs that are friendly and easy to understand by the beneficiaries, especially the young generation. Like a portal whose parts are made interesting, thus it can be easily understood by the audience. In addition, we developed student competition for disseminating L/D issues technically. Through this activity, new materials to introduce the concept of L/D are produced in the form of creative media. In terms of substance and theory process, we held a series of trainings and workshops that involve speakers from various backgrounds. The speakers presented various theories and case examples related to case studies of L/D events. The L/D materials that have been produced also tested in the learning process at IPB University. More detail Implementation of the output is described below.

(a) Loss and Damage Portal

<https://lossanddamage.id>

At a glance, e-learning (for store the LD materials), e-survey, calculator, CRM, event

The purpose of the L/D portal is to serve an e-learning portal system that can store all materials related to L/D (document, activities, creative-media, etc.), including the output materials of the first period. Hence the material could be accessed easier by several interested learners, practitioners and the wider public from Indonesia and beyond.

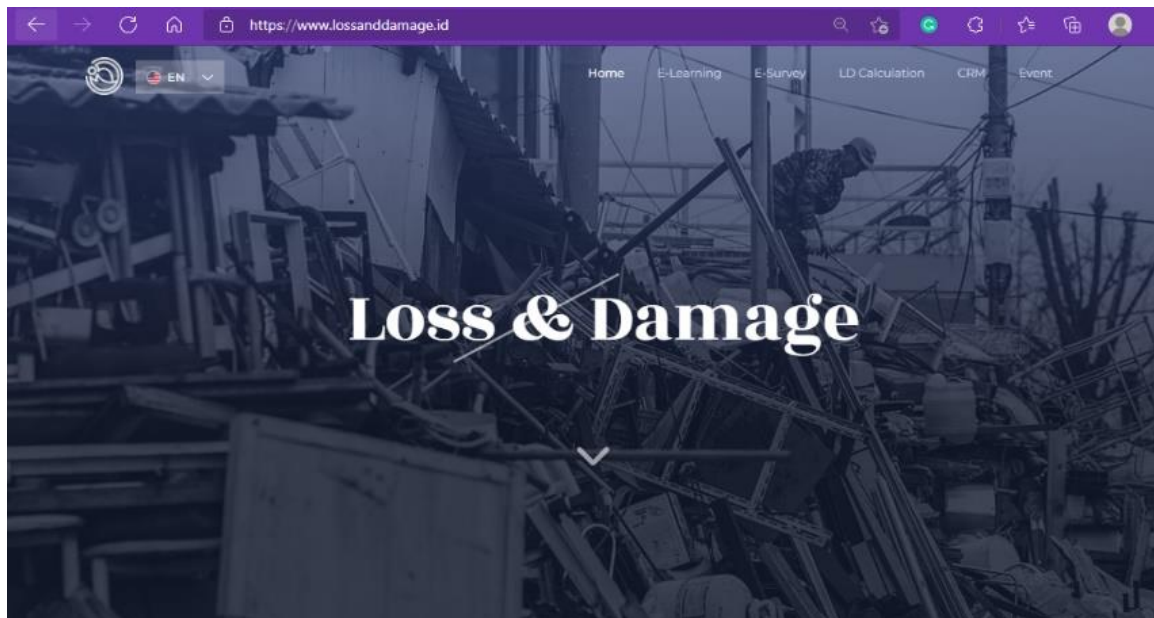



Figure 3 Home page display of L/D portal

Portal LD displays a variety of climate change information which are free accessed. It is also downloadable, thus the users can read it in offline mode. This portal is equipped with features such as E-Learning which consists of Modules, Assignments, Multimedia, and E-Library, then there are E-Surveys, LD Calculator, Climate Risk Management (CRM), and Events. The L/D portal is available in Indonesian and English, so that web visitors from outside and within the country can understand what information is contained in the portal. This portal also contains the development of CRM Modules and Business Modules for Disaster-prone and Post-disaster Areas. Actually, this portal stores all the output of this cooperation period.

The LD portal was designed to be interesting especially for young generation, thus the content can be easily understood. Instead of conduct the special event for introducing the portal, we go through the news to email and advertisements on social media. This method is quite effective, considering that social media is currently one of the platforms that are widely accessed by the young generation, especially during the pandemic era. This portal is quite a brilliant initiative because there is no similar information in Indonesia yet. But however, the LD Portal still could be developed to become a database of LD information in Indonesia.

(b) Public Literacy Survey

 500 Respondents (Student, Government, NGOs, Private Sector)

 June, 22nd – July, 18th 2021

 Survey form (<https://ipb.linksurveipsb>);


Result report in english (<https://ipb.link/surveyld-en>);


Result report in bahasa Indonesia (<https://ipb.link/surveyld-in>)

The public literacy survey was developed to identify and measure the level of public literacy about L/D due to climate change and Climate Risk Management (CRM). This online survey was conducted with 500 respondents who were randomly distributed across Indonesia. through the public literacy survey, it can be seen what needs to be improved for mainstreaming L/D in the context of climate risk management. The survey results show that respondents, especially youths, often hear related climate change sentences, but their understanding still needs to be improved, especially regarding the existing regulation. Moreover, it is necessary to improve the governance of L/D at the government level, hence the mainstreaming efforts of climate risk management can run well and the actions that

have been taken can be measured in terms of achievements and their impacts. The survey results also used as one of the sub-pages in the portal.

(c) Student Competition

 713 Participants (students in high school and college)

 June, 1st – 31st 2021


 Photography, Infographic, Video Campaign, Jingle, Bussines Idea

 <https://ipb.link/kompetisipsb>

To enrich the material for disseminating information on L/D, the competition entitled as **The National Competition for Loss & Damage to Tropical Biodiversity for Students** was held. Detailed information on this activity can be seen at competition sites (<https://ipb.link/kompetisipsb>). Indirectly, through this activity, participants are exposed to L/D information and are encouraged to find out more details regarding the issue of L/D. New materials to introduce the concept of L/D are produced in the form of creative media, such as photography, video, infographics, and jingles. This activity collaborates with and gets support from various parties both at the national and international levels, including Ministries/Agencies, Research Institutes, Universities, and the Community.

(d) Trainings and Workshops

 >400 Participants (students, communities, governments, academia)

 April – July 2021

 <https://www.lossanddamage.id/news>

Materials that have been developed in both the first and second periods are used as material for interactive activities. Its activities include training, workshops, podcasts, in-class discussions, and focus group discussions with various government agencies and institutions, as below:

1. Business Training 1: Business Tips During a Pandemic
2. Business Training 2: Easy Ways to Build a Business Foundation
3. Business Training 3: Learning from Business People in a Pandemic Period
4. Student Conference on Climate Change related on L/D
5. International Workshop: Mainstreaming L/D among ASEAN Countries
6. GIMICK Podcast (Gimana Cara Kita?): Youth Recognizes the Impact of Climate Change
7. Inclusion of L/D materials in the in-class activities on Natural Resources and Environmental Management Science Study Program (PSL), IPB University
8. Inclusion of L/D issues in various meeting/discussion activities with Ministries/Institutions

This interactive activity fulfills the mainstreaming of L/D material in terms of substance and theory. In training and workshop, the speakers presented various theories and case examples related to case studies of L/D events and how L/D are important to be part of climate risk management. Furthermore, the material for L/D was also tested in the learning process at IPB University. Students are asked to share their experiences with climate hazards and try to identify the L/D. They are also led to planning what efforts can be planned to manage the impacts of climate hazards. The activities and outputs that have been produced encourage the beneficiaries to know the basic information of L/D due to climate change. They recognize that there is a difference between L/D and they realize that this issue is real and important to pay attention to that. This has a big impact for them to increase awareness of how important it is to immediately take climate risk management. Considering that the environmental damage due to climate change that is happening today will have a very strong impact in the years to come, where it is the younger generation who will face the impact.

Since the beginning, the main target of the output targeted to be useful for at least but not limited to: (a) Students who learn about L/D material, (b) Trainers or practitioners from local community or experts, and (c) Government related to climate change management and disaster risk management. The coverage of the target area is not limited to beneficiaries in Indonesia, but is also designed to be accessible within the ASEAN region. It turned out that the enthusiasm of the audience was very good, within approximately 4 months of the ongoing cooperation, there were more than 1000 participants and beneficiaries who were exposed to the output and activities that had been developed. This number is very likely more than we managed to record, considering that various online materials are currently easily accessible to anyone at any time.

Furthermore, in addition to targeting many participants and beneficiaries, this cooperation has involved various parties from individuals, academics, communities, and government institutions as mentioned in the Figure 2. They warmly welcome this cooperation initiative. The involvement of the parties includes but is not limited to: (a) disseminating information on survey activities, competitions, and other activities; (b) take a role in literacy survey; (c) support and provide input in the preparation of materials; (d) become resource persons and or participant in the training, workshop, and or webinars.

Various activities during this period have also been released in several media, either pre-activity information, press releases, or other matters related to project activities. This shows a good response from various parties, so they want to help disseminate information related to activities. Among the news are as follows:

1. Student Conference
<https://ipb.ac.id/news/index/2021/06/hadapi-perubahan-iklim-mahasiswa-geofisika-dan-meteorologi-ipb-university-gelar-konferensi-mahasiswa/ede7555cacb172d0cf074ec7bc51886b>
2. GIMICK Podcast (Gimana Cara Kita?): Youth Recognizes the Impact of Climate Change
<https://ipb.ac.id/news/index/2021/06/podcast-gimick-cara-anak-muda-kenali-perubahan-iklim/b1391b838d18b4e9521dcb256930dd12>
3. International Workshop: *Mainstreaming Loss and Damage among ASEAN Countries*
<https://ipb.ac.id/news/index/2021/08/pusat-studi-bencana-ipb-university-gelar-workshop-internasional-bahas-loss-and-damage-akibat-perubahan-iklim/a920b10769e1dead324c51d23064cf70>
4. Student Competition
 - <https://www.facebook.com/265134686905181/posts/4148330995252178/?d=n>
 - https://twitter.com/BNPB_Indonesia/status/1405353822944251913?s=20
 - <https://lppm.ipb.ac.id/pengumuman-kompetisi-nasional-loss-and-damage-in-tropical-biodiversity-psb/>
 - <https://www.lombanesia.com/2021/06/kompetisi-nasional-loss-damage-in.html>
 - <https://www.biotrop.org/othernews/national-competition-loss-and-damage-in-tropical-biodiversity>
 - <https://www.bnpb.go.id/berita/-info-lomba-intensitas-bencana-meningkat-apa-kabar-alam-indonesia->

5. The Future Potential Development

Activities and efforts to increase loss and damage literacy in the future must be implemented through various initiatives. This effort is in line with the national development plan related to national priority 6 on disaster resilience and climate change (RPJMN 2020-2024). The initiative to increase literacy loss and damage is also an action step from the national commitments listed in the 2020 Nationally Determined Contribution (NDC) roadmap strategy. In addition, this initiative also has a major role in supporting sustainable development goals (SDGs), especially in the 13th target set related to climate action.

We consider that the output material is still possible to develop. As we have developed a loss and damage portal as a platform for increasing L/D literacy to a wider audience, the improvement of the portal, both from a technical and substantive aspect, must be strengthened. From a technical point of view, L/D Portal needs to be developed into an interactive platform, so that users can perform best practices while using L/D Portal, such as registering, filling out articles, and doing other related activities. The L/D Portal must also increase its capacity from the substance aspect through the improvement of various information in it. Articles and information related to L/D must be filled out so that many parties gain more complete knowledge of L/D. In the end, through these various efforts, the L/D portal is expected to become a loss and damage information database in Indonesia, which is collaborated with various commitments and work plans of national and sub-national governments. The L/D portal can also be used as the main reference for e-learning for the wider community.



Figure 4 Penta Helix collaboration mechanism for mainstreaming loss and damage

Furthermore, the role of various parties in mainstreaming loss and damage in Indonesia can also be increased through the Penta Helix collaboration mechanism, starting from the government, academia, the community, business actors, and the media (Figure 4). The government as a planner and policy maker for various commitments and developments must put forward the concept of loss and damage in the national agenda. Academics, especially universities, must develop innovation and research in an effort to reduce loss and damage in various fields and sectors. Communities through best practice mechanisms also need to link the concept and practice of loss and damage in various local activities and initiatives. Business actors in carrying out their business fields must continue to prioritize the values of risk and loss and damage, especially in the fields of disaster and climate change. As a group that must be involved, the media must also mainstream loss and damage in various journalistic activities and disseminate information to the wider community on various platforms.