



THE PROVISION OF INDONESIAN CLIMATE SERVICE IS URGENT TO STRENGTHEN TO DEAL WITH GLOBAL CLIMATE CHANGE

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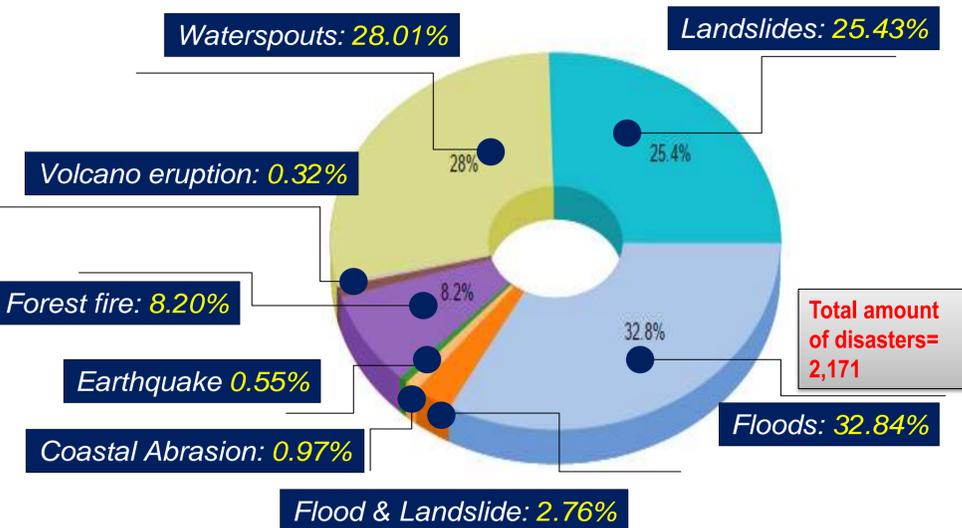
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Introduction

Negative impacts of climate change can be avoided by adaptation programs so that sustainable development will continue. Basically, the ideal adaptation is that considering social factors in poverty reduction and increased well-being and environmental factors that consider the preservation of biodiversity (Eriksen and Brown, 2011). Furthermore, the alternative sustainable development requires the provision of climate prediction. From the explanation above, it is urgent to strengthen climate information services because of huge user demands to adapt on climate change. Based on the Indonesia Meteorological Law (UU MKG No. 31/2009) in 2009, the Indonesia Agency for Meteorology, Climatology and Geophysics (BMKG) is the official agency that has the right to coordinate climate observation system and climate information services (CIS) in Indonesia. The demands of CIS tend to increase because of the dramatic rise of climate-related disasters. However, there are some gaps between the provision of climate information services and demands. These gaps turn up because of the weaknesses of quality products and human resources. Therefore, these kinds of weaknesses should be strengthened in order to deal with climate change. Possible solutions for these problems are handling a good cooperation between competent institutions to create a strong collaboration (co-approach) and conducting training to users, both intermediary- and end-users (top-bottom approach) and gain feedbacks (bottom-up approach), respectively.

The Demand of CIS in Indonesia Rise Dramatically

Climate disasters have increased sharply. The demand of Indonesian climate information services rise dramatically related with an increasing natural disasters triggered by climate change incident. In 2016, there are 2,171 disasters in all over Indonesia region. The most frequent disaster in Indonesia is climate-related disaster (BNPB, 2016).



National Disaster Mitigation Agency (BNPB) is one of CIS intermediary users provided officially by BMKG. Moreover, In addressing an innovation of CIS methods, BMKG also needs to strengthen coordination with Ministry of Finance that has established sustainable development finance (SDF) for addressing climate change through fiscal policies.

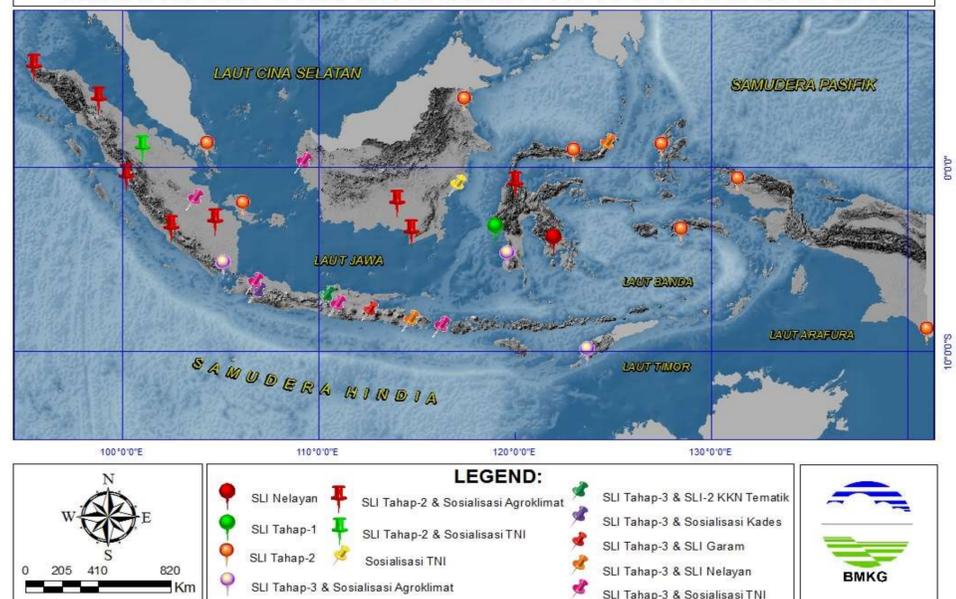
Gaps between Climate Information Services and Its Demands

There are some gaps between the provision of climate information services and demands. On the other hand, all efforts undertaken by the governments related to the provision of climate information services will not be useful if it is not followed by a good quality of information. There are some problems strongly believed to be hurdles in preparing a good climate information service. One of the problems that makes a lack of climate information services is human resources for both supply- and demand-side. The preparedness of climate information services needed an advanced skill, both practical and theories. Unfortunately, climate change makes climate service is more challenging to deliver to intermediary- and end-users as there are many technical languages to translate.

Strengthen CIS in Indonesia

As climate services provider, climatologists should regularly upgrade their knowledge and experience in climate science. In the demand-side, education and training process are also a vital factor for climate-users to achieve the best understanding of climate products in purpose to translate information into actions. There are various ways to improve the understanding of climate information, one of them is called Climate Field School (CFS) project for farmers. The main goal of CFS is to promote the importance of climate information in supporting agricultural sector in Indonesia and to enhance the capability of farmers to make proper adjustment and adaptation to climate change. This project is reasonable approach based on Yamazaki and Resosudarmo (2006) show that to sending back farmers to study at school generated good results for improving of yield and address problem that caused by agricultural activity.

CLIMATE FIELD SCHOOL ACTIVITIES AT 33 LOCATIONS IN 2016



To date, besides farmers as end-users, the participants of CFS are also comprised of fishermen, university students, and military personnel.

Conclusions

The demand of climate services in Indonesia rise dramatically related with several factors, such as the increasing of natural disasters, the various advantages of climate science, and the effort of government promote their products. However, there are some gaps between the provision of climate services and demands. Possible solutions for these problems are handling a good cooperation between competent institutions to create a strong collaboration (co-approach), conducting education and training to improve users understanding e.g. through Climate Field School (CFS) program (top-bottom approach), and also conducting a questionnaire to evaluate and gain feedbacks from stakeholders (bottom-up approach). As a result, climate information services in Indonesia will be strengthened.

References

- Eriksen, S & Brown, K 2011, Sustainable adaptation to climate change, Climate Change and Development, vol. 3, no. 1, pp. 3-6.
- DeGaetano, AT, Brown, TJ, Hilberg, SD, Redmond, K, Robbins, K, Robinson, P, Shulski, M & McGuirk, M 2010, Toward Regional Climate Services. Bulletin of American Meteorological Society, pp.1633-1644.
- Yamazaki, S & Resosudarmo, BP 2006, Does sending farmers back to school have an impact? a spatial econometric approach, Annual Meeting, August 12-18, 2006, Queensland, Australia 25427, International Association of Agricultural Economists.

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