

CHAPTER VI

CONCLUSION AND RECOMMENDATION

1.1 Conclusion

This research is aimed to analyze the reason behind low public R&D expenditure in Indonesia. It employs political economy approach to analyze how resource distribution is done to support the development and utilization of S&T in Indonesia. Thus, it begins with understanding the State Budget (APBN) formulation process in Indonesia Central Government. The finding is used to analysis factors underpinning low distribution on R&D. And lastly, it studies the how the results of R&D is utilized in Indonesian industries.

The finding of the research can be summarized as the following:

1. The State Budget formulation is a politically negotiated process. Program priority is formulated within a political system which involved some actors, both executive board and the House of Representatives. During this process, good capacity in political discourse is significantly needed because the goal is collective decision, which becomes the priority in national development as represented in the State Budget.
2. Understanding the dynamic of the State Budget formulation process lead to investigating political economy of R&D in Indonesia. There are some factors underpinning low allocation on Indonesian public R&D. Indonesia condition which is still occupied with social and economy problems has influence the Government and political system in putting R&D in less priority program. Besides, negotiation in cabinet and parliament needs political discourse capacity, in which leading sector

of research institution is considered weak on it. Lastly, Indonesian R&D is lack of business sector participation, whereas the government expects the development and utilization of S&T should be in cooperated with them in regards to low fiscal capacity of the State.

3. The common problems of public R&D in Indonesia is funding and products commercialization. The government has tried to find solution by synergizing the Triple Helix network of University – Industry - Government (U-I-G) by establishing Business Innovation Centre (BIC), a Non-Government Organization, as intermediary. This effort seems beneficial after evaluating the number utilized product of innovation as published annually in “Inovasi Indonesia”. The mechanism of U-I-G networking is expected can help solve problems, particularly related to R&D funding and commercialization.

1.2 Recommendation

Based on the analysis of the policy on R&D expenditure in Indonesia, this research offers some recommendations in regards to this issue.

1. For further research

Further research on the issue of R&D policy, particularly on expenditure case is expected to be conducted deeper by using mixed method. Besides qualitative data, quantitative data on the comparison on R&D expenditure, number of patents resulted, and number of utilized innovation in business sector is considered significant to see the efficiency of R&D expenditure in supporting economic development in Indonesia.

It is suggested as well to compare with some countries which have similar background in economic capacity to see their investment in R&D activity. Thus, it is substantial to examine their political economy in R&D to compare resource distribution in supporting S&T development and utilization.

2. For the Government of Indonesia

The State Budget which represents program priority of the government is a collective decision which is formulated within a political system. To date, R&D has not been priority despite its significance for S&T development to realize a sustainable knowledge based economy. It needs collective coordination to make S&T development and utilization well implemented in Indonesia.

Depending on normative law is not enough. Collective decision thus cannot be realized by holding only normative rules. Neither can we blame leading sector of ministry of his low capacity in negotiation. The point is the *system which can support S&T development and utilization in Indonesia should be built*, not only the technology capacity but the political institution: government, House of Representatives, academy/researcher, industries, and society. Therefore, R&D can become priority in national development.