

The Development of Green Economy: Way to Balance the Environment Protection and the Economic Growth in China

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Abstract: Nowadays, the conflict between environment protection and the economic growth in China becomes sharp. The idea of green economy came out to introduce a new economic growth mode which at the same time focus on the environment protection. This article discusses three economic sectors, following the sequence of agriculture, industry, tourism and finance, to develop several methods which could both boost the economy and access the environment protection efficiently in China.

Keywords: Economic growth; Environment protection; Green economy.

1. Introduction

In recent years, governments from all over the world came up with several environmentally friendly policies to restrict emissions, preventing the global environment from getting worse.

However, developing countries will face the conundrum which is keeping or even accelerating the economic growth while accomplishing the goal of reducing pollution. It seems like an impossible mission. Millner and Dietz mentioned in their article that keeping development is the only way to adapt to climate change, based on their models, investing in green projects will perform better than traditional projects which neglect the impact on the environment in the next few decades (Millner & Dietz, 2015). Accordingly, developing the green economy in China becomes a harmonious way to combine both the economic growth and the environment protection. By dividing economic sectors into three parts including agriculture, industry, the third part basically consisting of tourism and finance, advice is given separately to particular sectors to form a complete framework of green economy development.

2. Green Economy and Agriculture

In the year of 2020, the agricultural sector accounted for nearly 16.47% of GDP in China (National Bureau of Statistics, 2022). The agricultural sector is one of the most significant pillars of the Chinese national economy with such an enormous population. By introducing modern technologies into the agricultural sector, traditional agricultural tools are now replaced by advanced machines with higher efficiency to increase the output, and to reduce the damage to the environment caused by the conventional agricultural way like excessive-farming and pollution of fertilizers. However, during the implementation process, there are still several problems.

Taking the case of farms in Qinhuangdao as an example, a few drawbacks of the current situation are discussed, including the low educational level of farmers, incomprehension of environmental protection concepts and the lack of government efforts (Liu, Ye, & Zhang, 2017). These problems also could be generalized to farms all over the country, since the backgrounds are quite similar.

First, in Qinhuangdao, the average educational level of farmers could hardly let them to learn to use advanced agricultural machines by themselves, thus, lack of professional assistance or training will lead to abandonment of new technologies and back to traditional methods of farming. Secondly, farmers may have never even heard about the idea and concept of green economy, not to mention to get them to participate in the environmental protection actions. Finally, without a supervision sector, the local government

will perform sluggishly, feedbacks could not be given on time, causing lack of following up and further attention.

Accordingly, To solve these problems, first, during the implementation of providing advanced tools and machines to the farmers, the government should also send out professional experts to train the farmers (Liu et al., 2017). Secondly, the propaganda of environment protection is also required along with the machines training assistance. While helping them improve their farming skills, building up the awareness of green agriculture is also necessary. In addition, the government also should set up a supervision department to follow the further input to the farmers to prevent corruption and negligence of work. The punishment rules for farmers who abuse the toxic fertilizers and chemicals should also be set up (Liu et al., 2017).

It is not easy to thoroughly change agriculture from the traditional way to modern ecological mode immediately. The reform is still a long term revolution.

3. Green Economy and Industry

Recent years, the aim of carbon neutrality in 2050 in China has been officially posted by the central government (National development and reform commission, 2021). To accomplish this goal, the government pays high attention to the problem of greenhouse gasses emission and strictly controls the usage of fossil fuel as well as the natural gasses. Fossil fuels as an indispensable resource participating in industrial manufacturing add huge pressure on greenhouse gasses emission. Replacing fossil fuel with clean energy like solar and wind energy becomes the new focus of the government.

In fact, China has abundant solar and wind resources. In 2021, the wind resources were discovered sufficient in the northeast and southeast coastal areas. Although the distribution of solar resources is unequal, the potential of these two energies are incredible (China Meteorological Bureau, 2022). Since the western areas of China occupy the most solar and water energy, the west-to-east power transmission project will help transfer the electricity generated in the west to the eastern areas of China which require higher-level of electricity for industrial production. As long as this project is well performed, the eastern areas of China could reduce 250 thousand tons of carbon dioxide emission (Xinhua News Agency, 2022). In addition, this project will gradually develop the economy in the western areas, creating more occupations to the local residents.

As the government could continue to replace traditional energy with clean sustainable resources and apply similar projects like west-to-east power transmission projects, in the long run, the green economy of the industrial sector could make huge progress on carbon emission reduction.

4. Green Economy and the third sector

The third sector of the economy represents tourism, finance and other service areas. As finance and tourism are the most conspicuous areas, green tourism and finance will play an important role in the development of the green economy.

Recent years, the Chinese government has focused on tourism of western areas to encourage the economic growth of western areas. However, the development of tourism will cause environmental problems to the natural ecosystem (Ali, Ali, & Farooq, 2021). Protecting the local ecosystem and biodiversity will become the priority of developing green tourism there.

Taking the case in Bali, Indonesia, the framework of green tourism is designed in this example which could be enlightened for the western area of China to further apply (Law, De Lacy, Lipman, & Jiang, 2016). In this case, the supervision of the government in accordance with the cooperation of the local government is imperative for green tourism to develop. Only the surveillance from the government could be reliable enough to build up a generalized green tourism framework, setting up the measurements of greenhouse gasses emission and protecting native ecosystem. Thus, it is important for the local government in western of China to come out with regulations and rules to introduce punishments for the misbehavior of tourists.

Along with tourism, finance is also an essential pillar industry in the third sector. Finance market, as a derivative market of a substantial economy, could hardly be separated from the industrial sector or the agricultural sector. Thus, applying green finance properly could even affect the environmental protection performance of the industrial and agricultural sector.

According to the article written by Yue Zhu and other co-authors, the explanation of green finance could be defined as green financial derivative products like green stocks and green funds (Zhu et al., 2022). To further encourage green finance, the introduction

of ESG reports may be helpful. As a report measures the environmental performance of a certain company, in fact, a good ESG report indeed will increase the stock price of a company (Deng & Cheng, 2019). As the company performed well in the stock market, the investors will follow and invest more, helping establish a positive cycle to those companies that performed well in environmental protection, thus, boost the green finance.

5. Conclusion and Policy recommendation

For the green economy in the agricultural sector, the government should set up surveillance departments and continue to focus on the input of building up ecological farms. Green idea education and advanced technologies training should be conveyed to the farmers. For the industrial economy, accomplishing resource replacement will be necessary. Reducing the usage of fossil fuels and applying clean energies like solar, wind and water energy could help cut the emission of carbon massively. In the third economic sector, government oversight in tourism is vital, regulations and punishment could correct the misbehavior of tourists and protect the local ecosystem. For green finance, the introduction and popularization of ESG reports could establish a more green financial derivative market and thus affect the actual behavior of the substantial economy.

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