

IMPACT OF SRI ORGANIC AS COMMUNITY DEVELOPMENT PROGRAM OF PT MEDCO E&P INDONESIA

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ABSTRACT

Indonesia is an agricultural country that has majority occupation as farmer. Unfortunately, farmers still become the biggest contributor to poverty in Indonesia around 62.25% in 2012. As a country that has a vision to become an independent country, Indonesia should be able to meet the welfare of its people, including farmers. This can be achieved if the cooperation between the government and the perpetrators of activities in Indonesia; such as natural resource companies that perform social responsibility programs as a contribution to society. One form of social responsibility is a community development program which is considered to be more useful. System of Rice Intensification or SRI Organic Organic is one of the community development programs that were developed to improve the welfare of farmers. The aim of this study were 1) to evaluate the impact of a given Organic SRI as a community development programs; 2) measuring the level of Organic SRI farmers' income; 3) Organic SRI analyze opportunities in the future as an independent and sustainable program. By doing a case study on community development programs conducted by PT Medco E & P Indonesia in the dusun parit 9, Banyuasin District, the authors analyze and evaluate the impact of using SEAGA to 20 respondents. The results of these studies are intended to provide input in order to make the community development program more effective in the future.

Keywords: welfare, corporate social responsibility, community development, SRI organic, SEAGA

ABSTRAK

Indonesia adalah negara agraris dimana petani merupakan mayoritas pekerjaan namun menjadi penyumbang kemiskinan terbesar di Indonesia sekitar 62,25% pada 2012. Sebagai negara yang memiliki visi untuk menjadi negara mandiri, Indonesia harus mampu memenuhi kesejahteraan rakyatnya termasuk petani. Hal tersebut dapat tercapai jika adanya kerjasama antara pemerintah dan pelaku aktivitas di Indonesia; seperti perusahaan sumber daya alam yang melakukan program tanggung jawab sosial sebagai kontribusi untuk masyarakat. Salah satu bentuk dari tanggung jawab sosial adalah program pengembangan masyarakat yang dinilai lebih bermanfaat. System Rice Intensification Organic atau SRI Organik adalah salah satu program pengembangan masyarakat yang dikembangkan untuk meningkatkan kesejahteraan petani. Tujuan dari penelitian ini adalah 1) mengevaluasi dampak yang diberikan SRI Organik sebagai program pengembangan masyarakat; 2) mengukur tingkat pendapatan petani SRI Organik; 3) menganalisis peluang SRI Organik dimasa depan sebagai program yang mandiri dan berkelanjutan. Dengan melakukan studi kasus kepada program pengembangan masyarakat yang dilakukan PT Medco E&P Indonesia pada dusun Parit 9 kab. Banyuasin, penulis melakukan analisis dan evaluasi dampak dengan menggunakan SEAGA terhadap 20 responden. Hasil dari penelitian tersebut dimaksudkan untuk memberikan masukan agar menjadikan program pengembangan masyarakat yang lebih efektif di masa depan.

Kata kunci: kesejahteraan, tanggung jawab sosial, pengembangan masyarakat, SRI organik, SEAGA

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INTRODUCTION

Indonesia is an agricultural country that has majority occupation as farmer. Unfortunately, farmers still become the biggest contributor to poverty in Indonesia around 62,25% in 2012. (BPS Indonesia, 2012). However farming has a lot of potential that could be developed to decrease an issue of poverty and increasing people welfare. The welfare of family is indicated mostly by fulfill the basic needs such as food, healthy, and safety by Parsons Theory. Farmer's problems are generally classified as shortage resource of farming so providing production facilities and capital are necessary (Sudaryanto et al. 2006). The biggest actor who can solve farmer's problems must be government itself. But government is only helping about 50,3% in farming sector. Government could create some opportunities to develop Indonesia by any help from all parties who do activity in Indonesia. In the fact, companies who do the business activities in Indonesia, have enough sources to develop Indonesia (Saptono et al. 2010).

Since the nature of business is profit oriented, every business in the world aims to obtain financial gain as its main objective. However, as a part of communities, a company is also demanded to take a role in efforts of increasing social welfare. Financial achievement and social matter then become contrary issues in business world. Hence, there is a notion that takes those two matters into an integrated concept which is called as Corporate Social Responsibility (CSR). (Krisnawati et al. 2014). Corporate Social Responsibility is a company's commitment to increase community welfare by contributing company's resources and efforts in order to create a good business activity (Kotler and Nancy, 2005). CSR is also defined as contribution for stakeholder of the business activity. The definition of stakeholders are groups and individuals who can affect or affected by activity such as customers, employees, communities, shareholders, owners, investors, government, suppliers and competitors. (Freeman, 1984).

The form of CSR transforms in decades for example community development. PT Medco E&P Indonesia realized that company CSR was only charity or donation before 2010. The company realizes to transform the idea of CSR being community development. Robinson and Gary defines community development should provide four definitions. The first is a process or a method of implementing change such as technical assistance, self-help, or conflict approaches. The second is a program of specified activities such as housing construction,

adoption of agricultural innovations, or implementation of recreational programs. The third is outcome or the desired end result of a change such as more employment, housing, access to health care, or civic engagement. The last is an ideology of action to restructure the social, normative and economic order for desired ends and to achieve independent and sustainability phase.

Based on those perspectives, community development is an action or process to change the condition of community in one area by specific activity in order to get some good outcomes as desired and reach sustainability phase. Sustainability as a final goal of community development is known by sustainable development. Maples (2005) stated sustainable development as a combination between innovation and conservation to answer the challenge and changes by doing innovation continuously, sustainability can be approached. Sustainable Development starts by the relationship between profit, people and environment as triple bottom line theory by Elkington. Triple bottom line is intended to advance the goal of sustainability in business practices by synergizing those aspects. Firstly, profit is the economic value and benefit created by the company. Secondly, people are the fair and favorable business practices regarding to the parties which conduct to the company. Then, planet is the use of sustainable environmental practices and the reduction of environment impact.

SRI Organic is a community development program that PT Medco E&P Indonesia Rimau Asset introduced to people in Parit 9 since 2010. System Intensification Rice Organic or SRI Organic is a yield-increasing technique by organic. Organic means doing farming (planting and treating) without any chemical components. The fertilizer and pesticide are generally made by organic material such as animal feces or other plants. The principle steps of doing SRI Organic is easy to implement but the farmers should be educated to understand the basic knowledge bellows.

PT Medco E&P Indonesia Rimau Asset gave the basic knowledge and train the farmers about SRI Organic based on Table 1. The farmers learned how to make organic fertilizer, pesticide and mol (a liquid formula that gives nutrition to plants growth which is sprayed to the stems and leaves). They just need some animal feces and other plants for the ingredients. After that, they learned how to choose good seed by salt water. SRI Organic only needs 1 until 5 seeds for per hole but for common paddy needs 15–20 seeds per hole. They treat the plants by giving only organic fertilizer and pesticide

until harvest time. They can spray mol to the plant to give more nutrition. PT Medco E&P Indonesia Rimau Asset planned SRI Organic as community development to give benefit to community and reduce pollution for environment. It is close to the triple bottom line theory as mention before. The purposes is also to improve rice and agricultural productivity based on environment friendly practices to provide food safety and reach prosperity.

As a community development program, SRI Organic is expected to give not only a temporary benefit but future strategy for sustainable development. The goal of this research is to answer Indonesia's problem in farming activity that still face the issue of poverty. To answer the problem, there are three objectives of this research. The first is to evaluate impact of SRI Organic as community development program. The second is to measure the income growth of farmer SRI Organic and also to analyze SRI Organic opportunity in the future for being independent and sustainable program. The impact of program development should pursue an advantage change, social achievement, continuity result and also answering the problem in Indonesia.

METHOD

The data of case study is developed by SEAGA Impact evaluation questionnaire. Socio-Economic and Gender Analysis or SEAGA is an approach development based on an analysis of socio-economic patterns and participatory designed by FAO (Food and Agriculture Organization of the United Nation) in 2001. The objective of the SEAGA is to close the gaps between what people need and what development delivers is a guideline for an impact evaluation. The technique gathers data questionnaire of participant and compares result and planning of the program. The respondents are 20 farmers out of 38 farmers in Parit 9 and employees of Medco E&P Indonesia Rimau asset. The farmers are 20 males with planted SRI Organic about once time is four people, twice is one person, three times is five people, four times is three people, five times is two people, six times three people and eight times is two people. The average of productivity result increase into 3142 kg/ha rice after milling paddy.

The analysis of SEAGA questionnaire had made some highlights about significant result by qualitative. The questionnaire is made to know the before and after impact of the SRI Organic program. The outcomes of program should be compared with criteria of community development and evaluated by SEAGA impact evaluation. The main ideas of Robinson and Gary are basic idea of doing the research to meet the outcomes.

Table 1. Principle of SRI Organic technique

Principle	Reason
Using organic fertilizer 5-7 ton/Ha	Fixing the land's texture and structur, supporting the activity of land's biota, providing nutrition for the plants
Testing the seeds	The seeds should be in good condition
Planting the young seed age 5-7 days	Anticipating destroyed the root so planting the seed in the land after 5-7 days age
Planting single; one hole one plant	Seed efficiency, there is no competition to get nutrion from land
Planting 0,5-1 cm	Providing much nutrition, supporting the root grow by land aeration, growing faster, uneasy collapse
Planting by L shaping	Food reserve efficiency, bigger, healthier and white root
Planting distance 30 x 30 cm	No competition in getting nutrition, easier weeding process
Unlogged by water	Energy will be easier getting to the land, anticipating pest
Weeding 4x every 10 days, Spreying MOL	Providing O ₂ higher, Anticipating gulma grow, Providing stability of land structure, Adding bacterias activity
Do not using chemical fertilizer or pesticide	Fixing the ecosystem and quality of product, independent farmer (making the fertilizer and pesticide), good quality of products

The result is also close to the conceptual framework formulated by Figure 1 that is formulated as program purposes planning. The SRI Organic program is created for local farmer who has farming potential. Compared before and after farmer's condition by SEAGA impact evaluation, the result should be close to the company's goals. The company has some purposes to do the programs such as to engage the business with the community, increase people welfare and create independent institution as sustainable phase goal. PT Medco E&P Rimau communicates the business by doing the community development in order to engage and increase community welfare around the business. Result of engaging is expected to stimulate the operation of business that people around will not disturb the operation.

To check the validity of data, sampling was done to 20 respondents of SRI Organic participants by triangulation data. According to Sutopo (2006), there are four way of triangulation techniques such as data triangulation, investigator triangulation, methodological triangulation and theoretical triangulation. Basically, triangulation is a technique that uses multi-perspective mindset

phenomenology. This means that coming conclusion needs more than one perspective. So that to get the result should use and dig more than one source data such as the informant must be a different group or level. The samples are people who participate in the program by 1 until 4 years long.

RESULT

Impact SRI Organic as Community Development Program Evaluation

Participants felt that the program provide benefits for their life because it improve their living conditions in financial and non-financial. As figure 2 below, they agreed 34% the basic need can be fulfilled, 33% can buy assets (land, new motor, tv, Jensen, gold, hp and cattle) and rebuilt their house. The third largest impact about 14% agreed after joining the program they can help other family's need as well. Other 7% of them claimed to be able to pay children school in the city and the product result has a very high quality for them, while 5% is getting knowledge about agricultural.

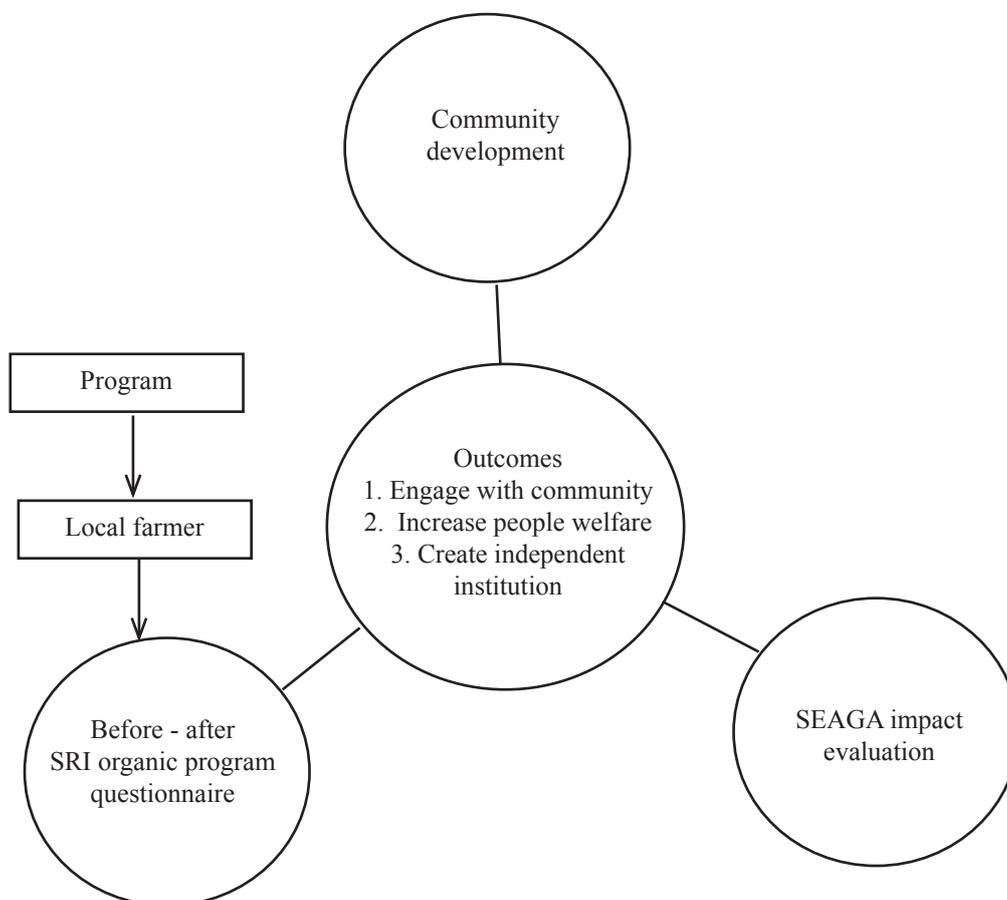


Figure 1. Conceptual framework

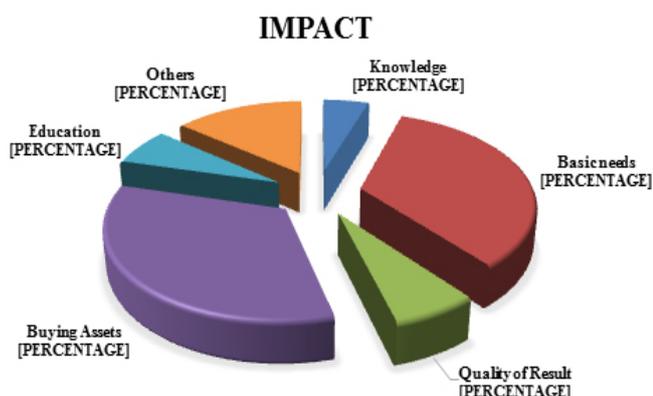


Figure 2. Impact program to farmer Chart

Mr. Abdullah as one of SRI Organic participant, felt that the program give much benefit for his family. The method of program is easy to implement that he can teach their children. It also helps their family's income and invests higher than he expected. Mrs Warsinah as farmer's wife confessed the SRI Organic is giving not only bigger productivity but also better and healthy quality of product. Her family in other village always demands rice organic. She even could sell it more than IDR9.000 for one kg rice. She also implemented the organic technique to other plants as vegetable and fruits to support family's life. The people agreed that the program has increased their life positively.

Today's condition of Parit 9 is extremely changing. Before 2010, the company should walk around 5 km to reach the area. There is even no electricity supply and government is not aware about the area. Now the benefit for the community itself is illustrated in Table 2. Before SRI they lacked of access for transportation, electricity, conventional farming with once a year planting and little area of farming. The roads were not passable to be access by vehicles but now it has undergoing a drastic change. After the company came, it had been very helpful in dealing with the surrounding community for fixing roads in Parit 9. The company helped to construct bridge to the access road. The company also gave tractor and milling of

Table 2. Before-after program impact to community

Before SRI	After SRI
No Access	Bridge
Traditional tractor	Tractor
No electricity	Solar cell donation
Harvesting once a year with failed risk 50%	Harvesting three times a year with failed risk 16%
10 ha area of farming	60 ha area of farming

paddy to support the running of SRI Organic farming and solar cells to help people get electricity. Moreover, they also feel the knowledge provided by Medco and other learning programs. In 2014, almost 60 ha area of farming that community have to plant SRI Organic.

Measuring Income Growth of SRI Organic Program

Based on observation and interview directly to the 20 respondents performed in Parit 9, it is seen that the increasing of SRI result production up to 3.142/ha per crop (the result attached in the appendix) after milling paddy. By the productivity, there is 5,18% increase in productivity result which is greater than the productivity of rice in South Sumatra (BPS, 2013). The result gives also contribution to the food safety in Indonesia. They get about 16 million rupiah for 1 ha. If they plant 2 ha per harvesting, their net income earned by farmers can reach IDR8.359.800 per month to harvest every four months or three times a year in contrast to conventional harvesting. Conventional harvesting can only harvest once a year and produce 1990 kgs rice after milling paddy per ha. Their net income was 1 million per month for 2 ha area with 50% risk of failed farming. The capital of planting materials was also large causing the farmers own debt to middlemen (tengkulak). With SRI Organic, the farmer could make their material for farming and push the production price by doing farming independently.

Surono as first farmers who joined the SRI Organic program, stated the productivity paddy of SRI Organic could reach 8 ton per ha. The paddy could be only 3-4 ton after milling because there is much water materials in SRI Organic. That is why SRI Organic is healthier and twice more much productive. Surono also confessed the SRI Organic could be implemented even the condition of area is lack of water. It is because the soil of SRI Organic is always giving good nutrient for the plant.

Before they joined the program, they could not even afford to fill their needs, health and education. Their life was very poor because they had debt and paid high rate for the farming capital. Following by this program the community not only meets the basic needs, health and education, but increases with the ability to buy assets and savings as the impact of SRI Organic result. Their ability to fill the needs is highly improved after joining this program.

Program Purposes and Future Opportunity

The first purpose of this program is to engage with community. Hirmawan Eko Prabowo, as Lead Medco E&P Indonesia - Rimau Assets, explained each Medco CSR program aims to introduce the company's activities, namely oil and gas company business. It would be very risky if the public does not get the socialization of the form and the company's activities around the area. As Figure 3, before following SRI program Organic, the public barely knew the activity of Medco - Rimau. But after participating in the program they are generally aware that Medco activity is oil and gas company, so that Medco - Rimau able to deliver the message through the program very well.

The second is to increase people welfare. Mr Herry Suriyadi explained that the company wants to improve people's lives without making them depend on the company. The company teaches skill and knowledge of farming without using any chemical. The company makes effort reducing urea with natural gas as one of its basic ingredients. Participants SRI Organic program believe that the goal of the training is to improve people's lives. This means that the company has been good enough to send the message and purpose of the program. The Parit 9 community's life is drastically changing and more developing also growing the prosperity.

The third is as an independent program which has independent institution. From 11 of the 20 participants felt ready to run the program even though it would not be accompanied by the company, while the other nine participants felt that the lack of readiness due to several things such as marketing and feel less able to run the program independently. Actually, determination of commodities is important because supply and the ability of natural resources, capital and human resources to produce and market all commodities produced simultaneously in a region is relatively limited (Susanto et al. 2007). In this case, SRI Organic programs lead Parit 9 to provide the product and maintain their resource. But they are still shortage of marketing strategy. If they reach the independent phase the company hopes for future sustainable development. Sustainable farming development has three purposes such as economic purposes for efficiency and growth, social purposes for the farmer's welfare and also ecological purposes for nurture natural resource and environment (Program Studi Agroteknologi Fakultas Pertanian Universitas Negeri Gorontalo, 2011).

As sustainability phase, the SRI Organic actually has a big potential for the future. Sustainability must have a referral program to get better until its final goal. The final goal of program development is to run the program independently. Satisfaction of SRI program participants does not guarantee the continued of independence. In general, participants had to have a mind to be independent, but they still need to be encouraged because it is still a sense of dependency to run the program, accompanied by the company. Participants felt their needs in marketing of product and irrigation system that Medco promised to build in Parit 9. They are really hoping the future of program could achieve this planning. SRI Organic has good future planning for Parit 9. It has capability to be sustainable by supported in some aspects and 100 ha area of SRI farming in the future stated by RT Parit 9.

Table 3. Productivity of farmer

Description	Productivity rice (kg/ha)	Selling price (Rice/kg)	Bruto income (ha)	Production price (ha)	Nett income (ha)
Before SRI	1990	IDR7.000	IDR13.930.000	IDR6.543.000	IDR7.387.000
After SRI	3142	IDR7.000	IDR21.994.000	IDR5.274.400	IDR16.719.600

Table 4. Income of farmer

Description	Avarage area (ha)	Nett income (ha)	Total harvesting/year	Monthly income
Before SRI	2	IDR7.387.000	1	IDR1.231.167
After SRI	2	IDR16.719.600	3	IDR8.359.800

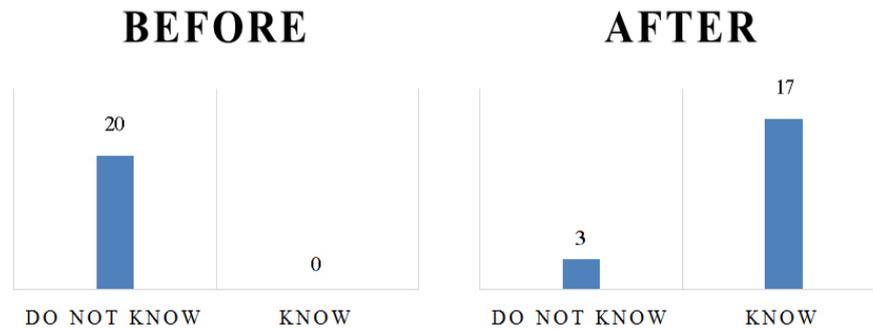


Figure 3. Knowing the company activities

This opportunity should be used for future sustainability. PT Medco E&P Indonesia constructs the final goal of program by build cooperative as indicator of independence and sustainability to develop market of product wider. Unfortunately, Parit 9 people do not understand yet about the cooperative itself. Cooperative be a social organization that fits to Indonesia's society. ILO (International Labor Organization) stated cooperative as an association of persons usually of limited means, who have voluntarily joined together to achieve a common economic end thorough the formation of a democratically controlled business organization, making equitable contribution to the capital required and accepting a fair share of risk and benefits of undertaking.

CONCLUSION AND RECOMMENDATION

Conclusion

The SRI Organic program has been achieving some improvement in Parit 9 area such as; easier access for transportation, access for electricity and rice planting improvement about three times a year. The changing process leads the Parit 9 to be developed. The good output of SRI programs are giving positive impacts for participants leads to increase welfare in Parit 9 and knowledge about Oil Company. The program is effectively engaging community and company. The program does not only give contribution for farmer but also food safety in South Sumatera. There is 5.18 % increase in productivity result which is greater than the productivity of rice in South Sumatera (BPS, 2013). The SRI Organic program has a good opportunity of further sustainability because it provides good impact for the environment since the SRI Organic technique does not use any chemical and prevent the environment pollution. It also would increase the social achievement.

Recommendation

SRI Organic Program has reached some of targets as community development program. However, the authors noticed that the program is not able to encourage the community to be self-sustainable and has not reached independent-sustainability phase. So the company should plan the program more carefully and strategically. The authors provide the following recommendations to make the program more effective.

First, it should be observed that the same thinking about the meaning of independence by the company and the community. To support the idea, company and participants can make a forum that aims to get the ideas of self-reliance in the Parit 9 community. If the cooperative could be a criteria of independence, there should be an understanding of the concepts and cooperative system to society Parit 9. After learning about cooperative, Medco should provide the knowledge of cooperatives to be implemented. Marketing cooperative is a cooperative to help farmers in marketing the product and the management of agribusiness and farming cooperative division can set farming time so they can farm together, manage human resources to help each other and set system irrigation.

Second, the indicators and limits of independences should be made by company as a facilitator. The purpose is to measure the results and impacts of the programs to participants. Companies can create a questionnaire prior to a program. The next program is a water dyke agreed by the community that is very important to their lives. Previously, the company can make the success indicator of the dykes program, such as; yield increases of 20% and community groups' implants min 2 times a year and so on. So after doing those steps, the company could make a best formula of community development as not only charity project but a real contribution for

society in the future. SRI Organic is a good example of community development run by a company. If this strategic formula could be adopted for every community development, Indonesia would achieve its vision as an independent country in the future.

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