

Korea's Saemaul Undong Revisited as Rural Development Game for Poverty Eradication: A New Development Economics Perspective

SUNG-HEE JWA

The 2019 Nobel Prize in Economics for Randomized Controlled Trials (RCT) has sparked the popularity of an experimental approach to poverty alleviation. This paper delves into this theme by revisiting the highly successful case of Korea's Saemaul Undong (New Village Movement) during the 1970s, which served as a precursor to such experimental approaches in economic development. It presents a comprehensive model of rural development aimed at poverty eradication, emphasizing the vital role of three key entities: the villagers, village organizations, and government, all operating under the principles of economic discrimination outlined in the new general theory of economic development. As a framework for rural development, this trinity model offers potential enhancements to existing market-oriented and villager-centered rural development approaches, as well as to the RCT model.

JEL Classification: B, D, O, Q, R

KEYWORDS: Korea's Saemaul Undong; Economic Discrimination; General Theory of Economic Development; Rural Development; Poverty Eradication

Glossaries: ED=Economic Discrimination; EE=Economic Egalitarianism; FR=Free-riding; GTED=General Theory of Economic Development; NIE=New Institutional Economics; RCT=Randomised Controlled Trial; SMU=Saemaul Undong

1. INTRODUCTION

The 2019 Nobel Prize in Economics honoured economists Professors Abhijit Banerjee, Esther Duflo, and Michael Kremer for conducting a Randomised Controlled Trial (RCT) similar to a clinical trial for its potential contribution to alleviating global poverty.¹ Surprisingly, however, it turns out that their RCT essentially mirrored to some extent Korea's successful rural development program known as Saemaul Undong (SMU) undertaken almost 50 years ago during the 1970s. Their findings are also similar to SMU's experiences: Small incentive differentiation can make a big difference in economic behaviour.

Sung-Hee Jwa is the former Chairman of the President Park Chung Hee Memorial Foundation and former President of the Korea Economic Research Institute in the Republic of Korea. He appreciates valuable comments by the anonymous referees. His e-mail address is <jwa4746@naver.com>.

¹For their research, see Banerjee, Duflo & Kremer (2016), and see The Committee for the Prize in Economic Sciences in Memory of Alfred Nobel (2019) for the survey of the RCT research.

Thanks to the SMU program and other similarly structured economic development policies such as export promotion and heavy and chemical industrialisation, Korea has transformed itself into a developed country that successfully eradicated poverty in the 1960s to 1970s and now became a member of the advanced world. This experience is one of only a few such episodes in the world after WWII.²

However, while the development economics professionals have been working hard to combat the global poverty, they have not been very successful thus far. Moreover, despite numerous studies and efforts in some corners of the developing world to learn the lessons of SMU's poverty eradication and rural development experience, they still do not fully grasp its true nature. SMU remains a local experience and has never been systematically dealt with by the development economics professionals, and its true nature as development economics is yet to be discovered. One should only be grateful for small mercies that the Nobel Prize committee unwittingly, though belatedly, recognised its value for development policy and economics via appreciating the RCT.

Saemaul Undong played a vital role in Korea's economic miracle and now turns out to be a hidden pathfinder for the RCT and even behavioural and experimental economics, as seen in coming discussions. Therefore, it may be natural to go back to its successful experiences to learn valuable lessons for growth and development-seeking countries. This paper intends to derive an inclusive and shared rural development model for poverty eradication based on the SMU's particular features, preceding and missed by the popular poverty-alleviation models, including the model of the RCT. This paper goes beyond explaining the success factors and implications of SMU done by Jwa (2018b) and presents a general model of poverty eradication based on the SMU experiences compared to the existing models. Therefore, this paper can be a sequel to Jwa (2018b) and is primarily motivated by the RCT model earning the Nobel economics prize.

Section 2 will briefly introduce some details of the SMU newly interpreted as a 'controlled economic development game', at the risk of duplication of some facts in Jwa (2018b). Section 3 will briefly introduce the new General Theory of Economic Development (GTED) (Jwa, 2017a, 2018a) as a basic theoretical framework to underpin the rural development model for poverty eradication. Section 4 will construct a general model for rural development for poverty eradication as a development game to be consistent with the GTED and the SMU and generally applicable, and compare it to popular community development models and the RCT model, suggesting some lessons from the SMU experience. Finally, section 5 will conclude the paper by emphasising the importance of protecting the economic discrimination policy from political distortion.

2. SMU, A 'CONTROLLED ECONOMIC DEVELOPMENT GAME'

2.1. A Short Overview of SMU

In the early 1970s, Korea launched the now well-known SMU (meaning 'New Village Movement'), purporting to develop rural communities comparably to the pace of urban development. Korean government implemented various infrastructure-building and farming projects and educational programs to change the mindset to a self-help spirit. The

²See World Bank (1993) for Korea's best inclusive and shared growth records in modern economic development history.

initiator, then-President Park Chung Hee, proclaimed the core principles of Saemaul as 'Diligence, Self-help, and Cooperation,' emphasizing his resolve to assist only those who endeavoured to help themselves. Remarkably, the President instituted a policy of granting additional support to villages demonstrating success in their self-help endeavours, while excluding those that were unsuccessful.

During the fall of 1970, an average of 300 bags of cement and a ton of steel bars were supplied to approximately 34,000 villages nationwide, allowing them to select and implement suitable projects autonomously. After six months, the government assessed all the villages' performance one by one and found that approximately 16,000 villages had made progress while 18,000 had not.

For the second round, the 16,000 successful villages were given 500 bags of cement, 200 more than the previous year, as an incentive. In comparison, the unsuccessful 18,000 villages were left out from SMU and received no government support. At the end of the second round, it turned out, 16,000 villages that performed well in the first round continue to excel, and, surprisingly, 6,000 out of the 18,000 left-out villages participated independently at their own cost and made a success. In this way, the government continuously carried out a strict meritocratic policy of supporting successful villages while dropping villages that did not perform well. The discriminative support policy based on each round's performance was decided by President Park Chung Hee alone at the risk of his own political fortunes, despite strong opposition from the State Council and the ruling political party concerned about losing the election.³

SMU identified three classes of villages based on their respective performance. The government's qualifications for a self-help village are 1) house roof improvement ≥ 70 percent; 2) farmland irrigation facility improvement ≥ 70 percent; 3) village fund ≥ 0.5 million Korean won; 4) average household income ≥ 0.8 million Korean won. The qualifications for a self-reliant village are 1) house roof improvement ≥ 80 percent; 2) farmland irrigation facility improvement ≥ 85 percent; 3) village fund ≥ 1 million Korean won; 4) average household income ≥ 1.4 million Korean won. The remaining lowest performers are classified as basic villages. The government supported only the self-help and self-reliant villages, leaving out the basic villages.

Now, I think it may be enlightening to see below an excerpt from President Park's keynote speech on the philosophy of SMU policy in 1972.

"Last year, the government provided subsidies, though not large sums, to about 34,000 rural villages nationwide to spur on the enthusiasm for economic self-improvement among them. The results were mixed: while some villages yielded good results, others did not. Based on this experience, we have decided to reject the universal support system in favour of a performance-based support system. This year, the government will support only about 16,000 villages that achieved good results last year. Out of those villages that receive subsidy this year, we will again select those that achieve substantial results this year and promote them to the "3rd grade" next year. Besides, out of the 18,000 villages that got failing grade last year and thus don't receive the subsidy this year, the government will select those that display unity and determination toward economic self-improvement and promote them to the "2nd grade," entitling them to this year's level of subsidy next year. This is the basic policy principle behind the government's support system in the SMU. It

³ See Jwa (2017a, 2017b, 2018b) for more details of the SMU policy.

is patently unfair to provide support for those villages where the residents idle away their days drinking and gambling in the same way as for those with residents who are determined to try to improve their own lives. The complaining voice from such villages may even drown out the voices of content from the thriving villages. However, there is no need to heed their complaints. It is said, “God helps those who help themselves.”⁴

President Park always emphasised the maxim of ‘God helps those who help themselves’ and adopted ‘the policy that rewards good performance and punishes underperformance based on actual performance’. This paper called this policy ‘Economic Discrimination(ED)’, treating economic differences differently by rewarding performance and punishing underperformance. This paper will argue later that ED is precisely the market’s economic development function that needs to be stimulated by the private corporation and the government for economic development.

2.2. How the SMU Worked as Development Game?

The western maxim that ‘God helps those who help themselves.’ is, of course, a familiar refrain to most of us. It is known to be from the parable of three servants, Matthew 25 in the Bible. In this biblical story, God praised two servants who doubled the balance of gold coins given by him but punished the last one who failed to do so.⁵ This maxim shares the same meaning with the oriental version of the dispensation of justice, ‘never fail to reward for merit and punish for faults’ by the Legalist School in the Warring States Period of China about 2,500 years ago. These maxims from both worlds are now substantiated as the economics of incentive by modern-day behavioural economics, which demonstrates two fundamental incentive devices of the ‘gain framing’ rewarding positive behaviour and the ‘loss framing’ punishing negative one.⁶

President Park’s SMU initiative is an ‘ED incentive policy’ that combines the ‘gain framing’ and the ‘loss framing’. SMU was indeed a ‘controlled economic development game’ that discriminatively provided incentives depending on the corresponding achievement levels – an outstanding example of a behavioural economics experiment that no other leader has dared to implement since, let alone back in the 1970s. With this mindset, President Park succeeded in solving the perennial poverty that had gripped Korea for eons in ten short years. This is a truly monumental achievement in the history of humankind. Even more astounding, this ED incentive policy was at the heart of his export business support policy, small and medium-sized firm support policy, and heavy and chemical industrialisation policy. In short, the so-called Miracle on the Han River was a direct result of this brave and determined behavioural economics experiment conducted on a nationwide scale.

Indeed, when evaluated side by side with the nearly inconceivable ‘Miracle of Failure’ north of the Demilitarised Zone, President Park’s ED incentive policy can be regarded as one camp of ‘controlled economic development game’ conducted over the entire Korean Peninsula. History has witnessed that South Korea which opted to reward

⁴ Excerpt from President Park’s speech delivered on a provincial inspection trip at North Gyeongsang Provincial Office, February 7, 1972. For the whole text, see Park (1979).

⁵ This maxim was made famous by Smiles (2008[1859]) in the midst of the English industrial revolution.

⁶ For the related works on the gain and loss framings, see Kahneman & Tversky (1979), Tversky & Kahneman (1981), Levitt & Dubner (2005), and Gneezy & List (2013).

self-motivation, achieving the Han River's Miracle on the one hand, and North Korea, which opted to purge self-helpers by labelling them bourgeois, setting an abject example of a failed state.

Now, one can see that the SMU under the ED policy was a 'controlled economic development game' of transforming the impoverished agrarian society into a modern, economically prosperous society played by all individual villages under the government-set ED policy rule.

Interestingly, in 2019, the Nobel Economics Prize was awarded to experimental economists, who conducted the RCT as mentioned already. The Prize Committee has acknowledged that their research will contribute to the poverty-eradication policy studies. Their experiments divide the target people or areas for research into intervention and (non-intervened) control groups and observe the impact of different incentives on their behaviours. Ultimately, their findings imply that differential incentives are the key driver for different behaviours.⁷ However, the RCT, as experimental research contributing to the evaluation of development policies, exhibits significant differences as well as similarities to the SMU as a real-world development policy. For example, the RCT, with the 'intervention group' typically receiving egalitarian incentives, ends up missing the essence of the ED incentive mechanism. These aspects will be discussed at length later in this paper.

Moreover, the SMU, a policy framework that might be borne out of the RCT or behavioural and experimental research, had already been tried and succeeded in real life and under dire economic hardship by President Park. Before those research became a significant new research trend in the world's development economics academia, he invented the incentive-based economic policy fifty years ago. He executed the same through sheer grit and determination against all the naysayers and political opposition. In so doing, he singlehandedly set one of the poorest nations on earth onto a trajectory towards the giddy heights of the 10th largest economy in the world today.

From this perspective, the paper intends to rediscover the SMU as a practical, experimental development game and, based on it, to build a new general model of rural development for poverty eradication, which can easily be accessible by poverty alleviation and rural development-seeking countries.

3. A GENERAL THEORY OF ECONOMIC DEVELOPMENT IN BRIEF

This section will introduce the General Theory of Economic Development (GTED) (Jwa, 2017a) as the theoretical framework for a poverty eradication model, only briefly for the self-completeness of the paper at the risk of some duplication of the previous works. The GTED extends the new institutional economics (NIE) (North, 1990, 1992b; Eggertsson, 1990) by incorporating the insight of complexity economics (Beinhocker, 2006), such as non-linear open interaction among economic agents leading to the subsequent emergence of economic development to a higher-order, complex economy.⁸

⁷ See The Committee for the Prize in Economic Sciences in Memory of Alfred Nobel (2019) for a comprehensive RCT research survey.

⁸ See Jwa(2017a) for the complete exposition of this theory and Jwa (2017b, 2020) for its theoretical and empirical application to Korean economic history. Also see Jwa (2018a) for a brief presentation of this theory and Stratieva (2018) for its concise review.

3.1. Weakness of Mainstream and New Institutional Economics

The NIE, as well as mainstream market-centric economics, now argues that economic institutions, primarily efficient property rights cum economic freedom, can play a crucial role in economic development as the efficient property rights system is the precondition for an efficient market. However, the questions linger, how to make property rights efficient, or have they ever been made so? Unless the way to make them efficient in an imperfect real-world market is fully articulated, the argument is reduced to circular reasoning. An efficient property rights system has been argued as the precondition for an efficient market. Still, at the same time, it is also true that an efficient market is a precondition for an efficient property rights system, as both depend on a perfect information assumption. Now, market-centric economics can blame inefficient property rights rather than an inefficient market as the cause for development failure.

In any case, market cum property rights institutions and economic freedom can indeed be important institutions for economic development but are hard to be a cure-all prescription. In analogy, the market is just like clean air. Clean air is necessary for healthy human living but not enough for nurturing an Olympic medallist athlete. In other words, the NIE lacks an enabling institution for the emergence of development. In this regard, the NIE needs to discover an enabling institution to help promote growth beyond the argument that the institutions of efficient property rights and economic freedom are essential. From this perspective, one of the GTED's main tasks is to discover what institutions can help bring about an emergence of a new economic order by going beyond the circular reasoning. The GTED argues that the enabling institution is the ED institution, which may not be a perfect solution but goes beyond the circular logic of the efficient property rights argument seeking the perfect answer in the imperfect world.

3.2. Development: Order-Transforming Emergence of Complex Economy

Following the logic of complexity, the GTED defines economic development as a non-linear order transformation of the economy, for example, from wagon economy to railway, to automobile, to airplane, and to spaceship economies, with necessary change of quality. This process is different from the linear transformation from an economy producing a few wagons to an economy producing a large number of wagons given the quality (order) fixed as in neoclassical allocation economics and growth literature. This interpretation is also entirely consistent with the Schumpeterian perspective, which reads, 'Add successively as many mail coaches as you please, you will never get a railway thereby'.⁹ This cleverly hints to us the complex nature of economic development, the realities of something more complex, larger, and beyond just the physical combination of coaches upon which mass transportation is built. Here, one could argue that the emergence of a new order rather than the mere combination of resources constitutes development.

3.3. Free-Riding: Necessary for Development but Cause for Development Failure

According to the Second Law of Thermodynamics, the open interaction for sharing synergy via exchanging success know-how ('meme' or cultural DNA) among economic agents is the fundamental process of the order-transforming development but necessarily involves free-

⁹ This quotation is from the first footnote on page 64 of Schumpeter (1974[1934]).

riding (FR), eventually killing the incentive for development and leading to development failure. The FR on the others' success know-how among interacting agents such as individuals and corporations is the natural economic development mechanism. However, it can eventually cause development failure by depleting the sources or creators of success know-how, unless non-market organisations provide the institutional protection for the interests of those sources, given that the market is always imperfect and subject to transaction costs.

3.4. Economic Discrimination: Necessary Condition for Development

Economic discrimination(ED), formally defined, as treating differences differently by favouring economic performances but disfavouring underperformances, can be a solution to the FR. The GTED argues that the ED is a grand principle to transform the unintentional evolutionary mechanism into the general theory for the emergence of a higher-order complex economy by dispensing economic justice via helping those who help themselves.^{1 0} On the other hand, economic egalitarianism (EE) can be defined as treating differences indifferently or equally. The GTED argues that economic discrimination (ED) is the necessary condition for economic development by motivating the incentive to grow, but economic egalitarianism (EE) is the sufficient condition for economic stagnation by killing the incentive to grow.

It is imperative to note that the ED principle should not be confused or associated with political and social discriminations. That is because strict ED is the optimal behavioural rule for survival in the market and can help drive out rather such discriminations from the market. The ED principle applies only to those whose economic performance should be justly compensated by precluding FR on their success know-how or providing alternative means of compensation.

3.5. Market: Necessary but Insufficient for Development

The GTED argues that the ED has become the market's fundamental function via the selection instinct and behaviour of market participants such as consumers, credit suppliers, corporations, workers, and any other agents, having the propensity to seek the best in the market transactions.

ED is a simple but fundamental behavioural rule of the market agents in a complex open interaction for non-linear order transformative economic development. The GTED emphasises that the market is fundamentally a motivational discriminator to motivate the market participants to grow and such a market's ED function is a necessary condition for sustainable development.

However, the market always fails in exercising ED correctly, that is, treating the sources of development fairly. The market alone cannot provide sufficient growth and development incentives because of the knowledge market imperfections and the resulting high transaction costs, leading to the FR.

3.6. Corporation: Invented to Internalise Market's Developmental Failure

Therefore, for retaining the development process, the transaction-cost-saving, non-market organisations must supplement the weak market incentive.^{1 1} The history of

^{1 0} ED is consistent with the 3-step formalisation of the evolutionary mechanism via mutation, 'differentiation, selection, and amplification' by Beinhocker (2006).

^{1 1} This argument is consistent with Simon's insight that the economy would rather be called an 'organisational economy' than a market economy. See Simon (1991).

economic development has been to invent transaction-cost saving organisations to supplement the market's ED function by internalising the FR behaviour. The private solution to the FR is the corporate organisation that can internalise the high-transaction-cost activities such as learning knowledge from others' success know-how. It turns out that the corporation and the market are the epitome of ED. The corporation's fundamental reason for coming into existence beyond the market lies in the ED function.^{1 2}

Human society has eventually invented capitalist corporate organisation, the limited-liability joint-stock company in the early 19th century after the long evolutionary history of firms. The corporate organisation's vertical command system helps avoid the transaction costs that otherwise have to be incurred by the market due to the horizontal negotiation mechanism of the market transactions.^{1 3} Moreover, the joint-stock company is a higher-order complex organisation that can expand the capital base and take investment risks, in principle, to an unlimitedly large scale that cannot be borne or even imagined by the individually- or family-owned companies prevalent in the era of the pre-industrial revolution. By inventing the joint-stock corporation, knowledge of success know-how has become easily internalised into the corporate organisation on a massive scale, and FR problems in a knowledge market could be significantly alleviated.

However, the corporations or the private economy (inclusive of the market) alone is not enough to generate growth and development because it remains subject to information imperfection and fails to exercise perfect ED. Successful corporations, in particular, are always under threat of FR on their own success know-how. The front-running, successful corporations are hard to sustain because their success know-how is continually exposed to and free-ridden by all the followers or potential predators.

3.7. Government: Necessary Part of Development

The national government needs to intervene by providing the ED institutions for the creators of success know-how to generate sustainable growth and development. Thus, the government becomes the necessary part of the economic development process with her ED support function, an essential and striking departure from mainstream neoclassical and neoliberal economic perspectives. The government (and the politics) needs to provide the ED institutions and policies for economic development, away from the EE institutions and policies.

This amounts to introducing a new theory of government policy consistent with the ED perspective as follows. The government should supplement and reinforce the ED institutions, particularly with corporate growth-friendly institutions, beyond usual market-friendly institutions. Economic policies and industrial policy, particularly for promoting S&MEs as well as corporations in general, should be designed to be incentive-differentiated based on performances, consistently with the ED principle. Moreover, Social policies in general, including welfare policies and social empowerment policies, should be designed to be consistent with the ED principle and could thereby be transformed into developmental policy. Note that the social policy's ultimate purpose should be to motivate

^{1 2}This argument is consistent with Alchian & Demsetz (1972), who see the firm and the market both as the mechanism of 'metering' productivity to match performance with reward.

^{1 3}Of course, the organisational costs for managing the corporate organisation must be considered to calculate the net cost saving.

and enable the low-income class to get out of the vicious cycle of poverty to join the upper-income classes, where the ED policy is indispensable. The state should also avoid introducing the EE policy regime for political purposes.

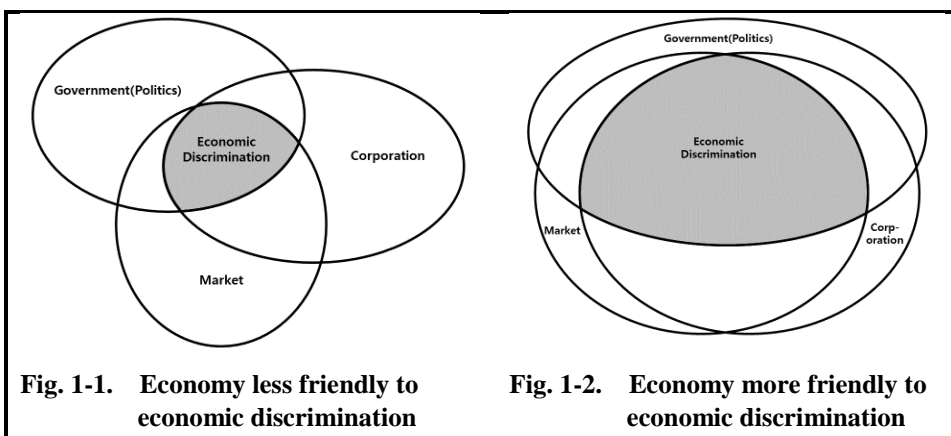
3.8. ED Union of Development Trinity: the GTED

Now, the market, the corporation, and the government constitute the development trinity. Therefore, they must work together as the economic discriminator if there can be any chance for an order-transforming economic development.

Figure 1 summarises the GTED. It implies that only when the trinity for economic development, market, corporation, and government exercises the ED policies jointly, the sustainable development process can occur. If anyone of them leaves the ED union, it is hard to achieve economic development. Moreover, the comparison of Figures 1-1 and 1-2 can help further understand the importance of ED institutions for development: as the trinity of development gets friendlier to economic discrimination, the chance to grow and develop will get larger. That is, as the set of union of economic discrimination gets larger as in <Figure 1-2> compared to <Figure 1-1>, the economy will get more chance to grow and develop. The economic development-seeking government should induce the markets and corporations to pull the growth and development with economic discrimination-friendly institutions and policies.

Therefore, the GTED declares that the ED by the development trinity is necessary for economic development, while the economic egalitarianism (EE), being the antithesis to the ED, is sufficient for economic stagnation.

Fig. 1. Exposition of General Theory of Economic Development



3.9. The GTED to Rescue New Institutional Economics

The GTED arrives at the argument that the theory of ED incentive is a grand theory of economic development. The ED institutions are the emergence-enabling institutions that have been searched long for by the development economics professions, in particular, by the NIE. In this regard, the ED institutions can tie up several loose ends of the NIE. While the NIE prescribes efficient property rights cum economic freedom for development, it has

not adequately addressed the critically important issues for development beyond them. In reality, it has to address properly the issue of how to motivate agents to compete, to take advantage of property rights efficiently, and to break away from the path dependence, all in the imperfect transaction cost-laden market. Lastly, it also needs to answer the question of what the guiding principles are for just and efficient institutions that the government has to provide. Instead, it used to say that as far as the efficient property rights system is out there, the competitive market would work powerfully to take care of everything.^{1 4} The reality tells us that the so-called efficient property rights and the resulting efficient market seem still a remote possibility, not to mention the efficient government and politics as the rule supplier.

The GTED is to overcome such circular reasoning built in the NIE by providing the ED policy regime, which can help resolve those issues. The GTED with the ED incentive mechanism embedded can:

- (1) Improve the weak market force of competition and the inefficient property rights via the ED's motivational function.
- (2) Change even the development-unfriendly mindset to a development-friendly self-help mindset by awakening agents' sleeping instincts for a better life.
- (3) Provide the ED as the guideline for just and efficient institution building.

Thereby, the GTED can also overcome the traditional laissez-faire market-centric allocation economics (inclusive of neoclassical growth economics) lacking the ED institution and the egalitarian socialist economics that is hostile to the ED institution. These implications are the most crucial contributions by the GTED, which can be taken home comfortably for the development policies in many other contexts like poverty eradication and rural or community development, as will be done in the following section.

3.10. The GTED to Extend Behavioural Economics to Macro-Development Economics

Behavioural economics has so far focused on explaining the microeconomic behaviour of non-rational agents in the real world economy, as seen in most works of leading behavioural and experimental economists.^{1 5} The GTED with the ED institution embedded amounts to a macro-development version of behavioural economics, implying the experiment can extend its scope from small to large to a nationwide scale. In fact, I think seeking economic development is no different from a nationwide competitive game played by the whole economic agents under the rule of the ED incentive system. The GTED implies that once the market, corporate firms, and the government altogether stick to the ED rule, this development game will naturally begin to create gradually more and more, and eventually mass self-motivated and self-reliant economic agents, leading to the development. Thus, the GTED is a macro-extension of the micro-behavioural economics via the ED incentive system enforced by the development trinity.

^{1 4} See North (1990, 1992b) and Eggertsson (1990) for the fundamental arguments of the NIE and North (1992a, 1993) for its critical loose ends.

^{1 5} See Kahneman & Tversky (1979); Tversky & Kahneman (1981); Levitt & Dubner (2005); Thaler & Sunstein (2008); Gneezy & List (2013); Banerjee, Duflo, & Kremer (2016).

3.11. The GTED as A New Theory of Political Economy

The GTED implies a new political economy theory that incorporates politics' role in development economics. The political regime can be development-friendly only if it embraces the ED institution. At the same time, the political regime becomes development-unfriendly if it becomes more inclined to the EE rather than ED institution. The former regime can be called the "economisation of politics", as it economises the politics, while the latter regime, as the "politicisation of economy, as it politicises economy. The critical point is, regardless of the specific types of political regimes, economic development can occur if the political regime supports the ED institution to be in place, while economic development is hard to come if the political regime adopts the EE institution. In short, only if the political regime helps to economise the politics, thereby helping to centralise the state power to mobilise resources for development by ED policy, can the development occur. This theory can be summarised as a four-regime paradigm of political-economy system by combining the economic institutions of ED vs. EE institution and the political institutions of democracy vs. non-democracy as follows: as market democracy (ED + democracy) and market authoritarianism (ED + non-democracy), which are development-friendly, and egalitarian democracy (EE + democracy) and communist/socialist dictatorship (EE + non-democracy), which are development-unfriendly.^{1 6}

This theory of political economy can help understand the complexity of economic development, like the stagnated growth of the developed economies under liberal democracy and the rapid growth under dictatorship, authoritarianism, or incomplete democracy like Korea and China. This theory implies that the reason for the success of Korea and China is that Park Chung Hee's authoritarian democracy and Deng Xiao-ping's communist dictatorship strongly supported and strictly applied the ED institutions to industrial or corporate policies and rural development policies. This logic can also apply to Singapore under Lee Kwan-yew and Taiwan under Chiang Kai-shek. Again, this logic can apply to the western industrial revolution under incomplete democracies with colonisation and slavery systems during the 18-19th century. All succeeded in economic development thanks to the ED institutions supported by their non-democratic governments. On the other hand, the long-term stagnation of the modern-day developed economies is due to the widespread adoption of EE institutions by their full-fledged democracies.

Interestingly, however, new institutional economics and the mainstream economics profession have difficulty explaining all those cases consistently. Especially how China lacking secure property rights and economic freedom could have grown so fast since the 1980s remains an economic perplexity. The new theory explains as follows. China adopted the ED incentive system applied to the collective farming sector and the state-owned enterprises, which has been the critical impetus for China's rapid development even under, but probably thanks to, the communist dictatorship. Note that Deng Xiao Ping's guiding ideology of 'the rich-led nation' is no different from the ED incentive system. The paper will return to this issue with more elaboration on Chinese rural development policy later.

^{1 6} See Jwa (2017a) for more details of the new theory of political economy.

Moreover, Acemoglu and Robinson (2012), while recently creating a buzzword of inclusive growth, fail to provide a convincing explanation for those cases. They designate political democracy as an inclusive political institution, non-democracy as an extractive political institution, and the market economy as an inclusive economic institution. In addition, they detail the inclusive political institution as a combination of plural politics and sufficiently centralised government without answering how those two elements could be consistently and harmoniously combined, while conceding the necessity of a strong centralised government for development. Here they are unclear about how a sufficiently centralised government can be democratic or different from an authoritarian government. With this simplified two-regime paradigm of inclusive vs. extractive institutions, they have difficulty explaining especially the successful cases of Korea and China under their mistakenly defined development-unfriendly, extractive political institutions. Compared to their model, the new theory with four regimes can provide much richer implications and applicability. Their model has no room for the non- or incomplete democratic, ED- and development-friendly political-economy regimes.

4. BUILDING A MODEL OF INCLUSIVE AND SHARED RURAL DEVELOPMENT FOR POVERTY ERADICATION

4.1. Necessary Elements of the Model

Now turning to the issue of rural development for poverty eradication, this section will discuss some essential ingredients of rural development model, which can be learned from the GTED, together with actual experiences of Korea's SMU.

4.1.1. ED Institutions

Above all, the GTED implies that the ED institutions are the precondition for inclusive and shared growth. The ED policy regime, via motivational incentive differentiation, can directly change the agents' economic behaviours, which, in turn, indirectly change their mindset to self-help spirit, reinforcing the development-friendly economic behaviour and producing inclusive and shared growth. Self-help mindset change, in turn, can help the ED policy regime to become permanent nature. Therefore, once the development process occurs thanks to the ED policy regime, the process will tend to be sustainable with favourable implications on inclusive and shared growth, as far as the ED incentive system continues to be intact. This case may be compared to the already-failed socialist economies adopting the EE policy regime, and most of the now-developed but growth-stagnated, the middle-income-trapped, and the underdeveloped economies all under the resurging EE policy regime. In this regard, the ED incentive-driven development will be sustainable with inclusive and shared growth. On the other hand, any policy regime antagonistic to the ED policy regime will be unsustainable, not to mention killing the incentive for economic development.

Moreover, as already mentioned, the 2019 Nobel prize-winning RCT and the now-well known propositions of behavioural economics such as loss and gain framings also imply the critical role of the ED incentive system in awakening the native people's self-help instinct dormant for long under the path-dependence of agrarian economic

mentality and in motivating them to run for self-improvement. Of course, this is no different from the significant discovery by the success experiences of the Saemaul Undong.

In this regard, the ED institution must be introduced as the critical element of any successful rural development game for poverty alleviation.

4.1.2. Non-market Organisation

The GTED implies that any development model should systematically incorporate non-market organisations' roles in the development process to be comparable to or even more crucial than the market. The organisation is the critical player to correct market failure and can play an even more vital role in a poverty-ridden rural economy where the market imperfections prevail so extensively due to such factors as the lack of social and physical infrastructure and the path-dependence on non-self-help agrarian mentality. The active roles of the village organisations and the government need to be fully incorporated in building the rural development model.

This was also the case for the Saemaul Undong, where the village organisation played a key role, just like the private corporation in the economy, with the village leaders assigned the active role like an entrepreneur.

4.1.3. Synergy between Formal and Informal Institutional Reforms

Having noted that the lack of the self-help spirit in the native farming or any other poverty-ridden society had been the key obstacle to development as widely observed in most developing countries, let us turn to the necessity of the government's mindset reform education. It is a necessary government's responsibility to supplement the formal ED policy regime by the informal self-help mindset reform via motivational education, which is an essential precondition for sustainable development. However, this issue has been treated lightly by the popular market-centric approaches, probably because it is assumed that an agent is rational or the mindset issue is supposed to be spontaneously handled by the market forces.

In general, the public policy intends to achieve a policy goal by changing the thoughts (mindsets or ideologies) and behaviours of the targeted people consistently with the policy goal. Thus, from NIE's perspective, firstly, the development policy should introduce and enforce strictly the formal institutions, which intend to induce the people's behaviour into a desirable direction. Secondly, the success of development policy also depends on how to change the informal institution such as people's mindsets to make the new behaviour sustainable because behavioural change forced only from outside without the supportive mindset change tends to be ephemeral. More specifically, the former task should be approached by formally establishing the ED institution that differentiates incentives according to whether the people's behaviour meets specific development standards. On the other hand, the latter task to change people's mindsets can be approached by educating people about the importance and necessity of a self-help mindset.

It has been very well recognised that the self-help spirits of the Saemaul leaders and the actively participating woman leaders, in particular, were critical for the SMU's

success. Naturally, things cannot go well without the voluntary and active participation of villagers. In that sense, it is noteworthy that the Saemaul education played an important role in changing the leaders' and the villagers' mindsets from blaming others for misfortune to the self-help spirit of blaming themselves. Note that the Saemaul spirits were declared as 'Diligence, Self-help, and Cooperation', and Saemaul education was concentrated on instilling such spirits into the people and teaching them how to work together to increase productivity and income. Saemaul leaders played a crucial role in this educational program as a lecturer by sharing their success experiences.

In the end, changes in mindset are essential, but nothing can happen without a change in actual behaviour or habits. According to the SMU experience, the ED policy with preferential treatment of the self-help villagers and villages helped transform all the villagers' mindsets and behaviours into self-help varieties. In the end, by combining the ED policy and Saemaul education synergistically, SMU was able to solve the crucial task of turning a non-self-help mindset into a self-help one and then turning it into actual behaviour for productivity increase.

In this regard, the rural development policy for poverty eradication needs to take advantage of the synergy between two reforms, formal institutional reform with the ED policy regime and informal institutional reform with self-help mindset education, to improve its sustainability.

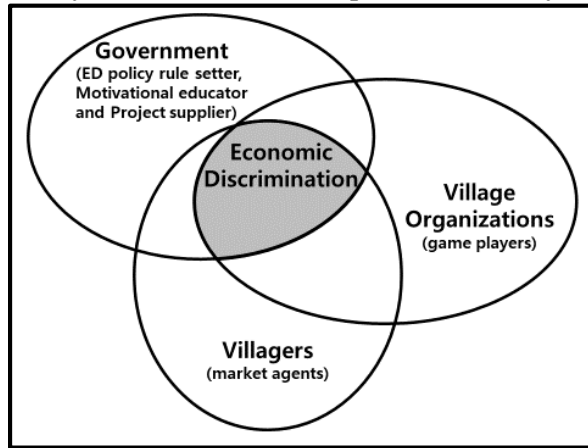
4.2. A Trinity Model of Rural Development for Poverty Eradication

4.2.1. Structure of the Model

Figure 2 presents the model of rural development for poverty eradication by consolidating the lessons from the new theory of development, GTED, as well as the experience of SMU. In fact, Figure 2 is the direct replication of Figure 1 in essence with some modifications suitable to the rural society. Here, one crucial extension from Figure 1 emphasises the need for the government to supplement the formal ED-rule setting with an informal institutional reform such as a self-help mindset change by motivational education and to provide appropriate projects for continuous income generation. This model states that the modernisation of rural society and poverty eradication can be achieved by implementing the ED principle by the trinity of development where:

- (1) The rural villagers (households) work as market agents.
- (2) The village organisations, as if corporations, internalise the FR behaviour and are led by village leaders as entrepreneurs.
- (3) The government sets the ED rule with motivational education and provides projects for continuous income generation.

This paper claims that this model, played as a development game under the ED rule, can bring a simultaneous achievement of increasing income and a self-help mindset reform, thereby leading to sustainable rural development with poverty alleviation and inclusive and shared growth.

Fig. 2. Trinity Model of Rural Development for Poverty Eradication

4.2.2. Role of the Trinity of Rural Development: Villagers, Village organisations, and Government

The trinity model identifies the trinity of rural development as villagers, village organisations, and the government. This section will elaborate on their specific roles for rural development in some details.

Overall, rural villagers engage in the Economic Discrimination (ED) function of the market through peer pressure within their communities. Village organizations, led by village leaders, enhance the villagers' relatively weak ED function within an imperfect rural market. Simultaneously, they are compelled to compete for improved performance under the government-established ED game rules.

Here, some details about how severe the market failure would be in the poor rural society, in general, may be necessary to understand the model better. First of all, for poor rural villagers or farmers as individual agents, the underdevelopment of public goods such as rural physical and institutional infrastructures is an absolute bottleneck limiting their capacity to break through their poverty trap. They cannot do much about it individually, given the FR-led market failure due to high transaction costs. Theoretically speaking, a village organisation can minimise transaction costs through its hierarchical command system, and therefore internalise the FR activities and minimise market failures. Accordingly, to provide public goods such as villages' physical infrastructure with high external effects for a whole village, the village organisations need to be in charge of village infrastructure construction and be designated as if they were a construction company. Naturally, the village organisations' leaders as project managers, by monitoring the participation and performance of individual villagers, can significantly help minimise the potential market failure and maximise the village and villagers' performances.

Furthermore, by recognising such a village organisation's role to internalise the FR-led market failure, this model breaks the conventional wisdom that market failure can be resolved only by government intervention. Thereby, the model can induce an inclusive and shared growth among all the village members, in principle, because every member is given an equal opportunity to participate in village projects jointly. The village organisations play a key role similar to a corporate organisation in the private economy, where the village

leaders play a function identical to private entrepreneurs. This village-based rural development policy will produce a shared growth compared to the individual household-based policy because it can more easily bring all the village members into ‘the development game’.

Lastly, the government should maintain the ED rule to support better-performing villages based on the village’s actual development performance with government-funded projects and provided an ongoing motivational education for a self-help mindset change. Thereby, the government can immerse all villagers and villages into a fierce performance competition, inspiring capitalist self-help spirits among the villagers, and can help transform the agrarian into a capitalist economy. As a result, the synergy effect of the ED functions of villagers, village organisations, and the government, acting together as an economic discriminator, can bring poverty eradication and rural development.

In sum, having the ED incentive structure and the self-help educational program enforced by the government and the market failure internalised by the village organisations, the trinity model can achieve an inclusive and shared growth driven by government and community together. This had also been the case for the similarly structured Korea’s SMU.

As a final point, the trinity model fundamentally embeds the community’s democratisation process by emphasising the role of village organisation. This model trains villagers in autonomously selecting the leaders, establishing village organisations such as the village general meeting and other internal sub-organisations, and monitoring them to work for the villagers’ common benefit as well as participating as members of those organisations. As the rural economy grows and villagers’ income increases in a shared manner, the whole nation would necessarily transform into a middle-income society, which, in turn, paves the road to a full-fledged modern democracy through the participation of community members pre-trained for democracy. In the case of Saemaul Undong, President Park Chung Hee often declared that the Saemaul Undong was an arena for pre-training democracy. Korea’s democracy has now greatly benefited from Saemaul Undong’s experiences.

4.2.3. How to Run the Trinity Model as Sustainable ‘Rural Development Game’?

The trinity model is meant to be a model for a controlled development game, a replica of SMU. Therefore, to complete the model to work as a game, the government has to find out how to have villagers and villages voluntarily rush to modernise their living environment and make income through either competition or cooperation with other towns if necessary. To address such real issues of the development game, the government and any outside donors need to resolve the issue of how to allocate investment funds for what kind of development projects, under the assumption that the government and donors could also solve the problem of fund mobilisation anyway.

Assuming that everything should begin from the zero base given the extreme poverty condition of the concerned villages, one can draw a fundamental investment policy principle from SMU’s experiences. That is, ‘most investment projects should be able to provide a direct income source for villagers and village units above anything else, and otherwise the game will lose momentum from the outset’. Therefore, while projects need to be funded by the government or outside donors, they should be managed by the village organisation unit and carried out by the villagers themselves under village leaders’ control.

Afterward, the government's allocation of the investment fund should abide by the ED principle, conditional on the previous-round project performance after the first-round unconditional support. The excellent performance with projects will bring new funding for the next round project, but the poor performance will cause no more or less funding in the next round. In the latter case, the villages will be given less chance to improve their living environment and income.

Project management by outside private construction or commercial companies is not advisable because it will kill the village organisation's chance to work and learn management experiences and earn income for the village as a whole, and the villagers will tend to be marginalised out as income-earning workers. Therefore under the assumption that the government and donors reasonably well select the projects suitable for the village level capability and as far as the government can provide various technical assistances if necessary and, at least, the village itself is reasonably capable of managing the project, then the management responsibility should be assigned to the village organisations.

Under this consideration, what could be the potential projects? The order of priority projects is as follows; public-good projects funded by the government come first in early pace, followed by villagers' private-good projects. Most infrastructure projects which in principle belong to the government's responsibility, could be the priority. In this case, the villages will compete or cooperate among themselves by the performance of their village infrastructure constructions such as roads, water canals, public buildings, public utility systems, reforestation projects, etc. The wish list of infrastructure projects could be different depending on each village's conditions. Therefore, the choice of projects should be made by the village's own decision, maybe via village general meeting with outside advice from the local government and others if necessary.

Following the initial stage of income-earning, saving, and capital accumulation aided by the micro-banking institutions usually self-managed by the village unit, a reasonable sum of capital for private projects will be accumulated, and a self-help mindset and behaviour will begin to be realised in terms of the level of project performances. Then the village and villagers can venture to new high-value-added, private farming projects and other village businesses with government financial support programs. Hopefully, this latter pace will be followed by the self-reliant stage where the development cycle with high-value-added private farming or small businesses is routinised as regular and sustainable.

4.3. Comparison of the Trinity Model and Other Popular Programs

It may be worth comparing the trinity model with other internationally popular poverty eradication and rural development models as compared in Table 1.

The traditional rural development models can be characterised as a household-centered market model or a small number of model village programs.¹⁷ Here, the government has been a benign bystander, or worse, a spoiler rather than a promoter by not actively adopting ED policy rules and motivational education programs, and the village organisations have not been allowed the leadership role. Thereby, traditional models have been prone to market failures and produced mixed results. The individual household-based approach may be useful to take advantage of the motivational effect of the households'

¹⁷ See, for example, Kretzmann & McKnight (1993), UN HABITAT (2008), and Stoltenberg Bruursema (2015).

Table 1

Comparison of Trinity Model and Other Programs

	Trinity Model of Rural Development *	Community Development Model in general**	UN Millennium Village Project***
Players	- Villagers (Households) and Village organisations (leaders)	- Single town (place-target), and/or Households (people-target)	- Village community and/or Households
The scale of the game	- Nation-wide, repeated game	- Target place and town	- Scaling up from a few to several villages via a learning process.
Rules of the game	- ED: Intense rivalry among Village organisations based on performance	- None	- None
Education	- Government-led motivational education on self-help mindset	- None	- None
Game makers	- Government · ED-rule setting, and monitoring · Provision of infrastructure (public good) projects - Village organisations and leaders · Monitoring household participation for preventing free-riding and market failures	- Government · Need-based, people-target approach: egalitarian resource distributor · Asset-based, place-target approach: bystander (benign neglect) by egalitarianism	- International donors: funding but weak monitoring - Government: bystander (benign neglect) by egalitarianism - Community with weak ownership
Underlying Philosophy	- ‘God helps those who help themselves’ (emphasis on self-help spirit) - Organisation (government and village)-centered thought - Economics of Incentive	- Market-based Economics and egalitarianism	- Market-based economics and egalitarianism - Aid-driven development
Outcome or expected outcome	- Inclusive and shared growth (by joint efforts of government and community)****	Mixed	Mixed and unsustainable*****

Note: * Park (1979); Park (2005); Jwa (2017a, 2018b). ** Kretzmann & McKnight (1993); UN HABITAT (2008); Stoltenberg Bruursema (2015). *** The Earth Institute (home page). **** World Bank (1993); Jwa (2017b). ***** Mitchell et al. (2018); Sachs (2018); Sachs & Mitchell (2018).

ownership if they can invest in specific farming projects with outside supporters like the government and donors. However, suppose the rampant market failures in the poor rural society due to the free-riding prevent building basic infrastructure and sharing synergistic benefits stemming from cooperative works. In that case, the program's sustainability cannot be guaranteed. Furthermore, in this case, the lack of incentives to excel under the anti-ED, popular egalitarian support system and the lack of motivational education programs for self-help mindset reform will make matters worse on top of the insufficient infrastructure provision.

The trinity model, on the other hand, implies that a national development game under the government-provided ED rule and motivational education is likely to reduce the risk of failure by internalising the FR-led market failure and thereby facilitating the provision of public goods because it can bring all the villages and villagers into the game as players. Moreover, turning the policy target from individual households to village organisations, including and formally representing all households, will increase the possibility of inclusive and shared growth.

Recently, community capacity-building programs have focused on building a small number of model villages or individual projects, hoping others will voluntarily emulate such model villages; the UN Millennium village project was an example.¹⁸ However, even in this example of targeting the village unit, unless the other bystander villages are motivated enough to participate voluntarily, unlike Korea's SMU having a large-scale competitive game under the ED incentive rule, the program will become unsustainable. In this case, as mentioned several times, it must become evident that the ED incentive policy can serve as a wake-up call for the self-help instinct, which has been dormant under path dependence.

Concerning the community capacity-building programs, which now generally emphasise the importance of teaching how to catch fish rather than giving fish, Jwa (2018b: p 231) once stated, "*Knowing how to fish does not necessarily mean being a productive fisherman, or even going fishing. A more relevant question may be how to drive the fisherman to catch more fish in the sea or lake, not going on a picnic on the mountain with a fishing rod on his shoulder ... A fishing contest based on the ED incentive may help solve this dilemma*".

4.4. Some Suggestions for RCT

Deaton and Cartwright (2018) raise many interesting issues with the strength and weakness of the RCT experimental model, mainly from the statistical perspective. From the development perspective, this paper may provide a few suggestions on how to incorporate the emergent nature of development learned from the trinity model into the RCT, given the limited nature of the RCT as a *development experiment* compared to the SMU as *development policy* as shown in Table 2.

¹⁸ See, for example, the Earth Institute (home page in Google Web site), Mitchell et al. (2018), Sachs (2018), and Sachs & Mitchell (2018).

Table 2

Comparison of RCT and Saemaul Undong(SMU)

	RCT	Saemaul Undong
Philosophical basis	<ul style="list-style-type: none"> - Reductionism: The experimental group is treated as closed and isolated, without open interaction such as learning, rivalry, or cooperation. No complex mechanism for the synergy and emergence of the new order is allowed. - There is no referencing the ED incentive mechanism. 	<ul style="list-style-type: none"> - Holism based on complexity perspective: Cooperation, rivalry, and imitation led by open interaction among villages were fully utilised. Synergy via cooperation created a new order - Complex development process as non-linear order transformation via synergy effect could emerge. - ED incentive is the key philosophical and policy basis.
Methodology	<ul style="list-style-type: none"> - Simple application of lab experiments with unconscious body cells in medical research to conscious and complex human society reminds unsuccessful efforts for long by economists to make economics a genuine science. 	<ul style="list-style-type: none"> - The nationwide development game under the ED incentive rule helped maximise the development motivation by stimulating competitive spirit among individuals and villages who did consciously participate.
Experiment vs. Reality	<ul style="list-style-type: none"> - Participants may know RCT is a short-term experiment, responding opportunistically to meet the experiment's expectations. The experiment itself distorts the participants' behaviour, just like the aid recipients regarding the temporary donor-led program as a donors' exhibition program but not as their own development program. - Temporary experiments may fail to mimic the real impact under the permanent policy rule change. 	<ul style="list-style-type: none"> - Under the permanent change in the rule of the real-world game, agents felt pressed to be actively involved in the game in a self-help manner without being opportunistic. - Saemaul Undong was the actual game of success or failure, where the gain and loss framings were both operating. - Imposition of permanent game rule helped bring forth permanent change of self-help mindset and behaviour.
Policy implication or lesson	<ul style="list-style-type: none"> - The RCT concentrates on the aid or gift-induced development effect, typical with the ODA programs giving egalitarian support without referencing the ED incentive mechanism. - The RCT's "intervention group" members are given equal incentives, which kills the self-help spirit and behaviour. 	<ul style="list-style-type: none"> - The ED principle of only development rewarded can generate a development-friendly self-help spirit and behaviour. - Under the ED policy rule set by the government, the peer pressure by neighbours and the monitoring by village organisations helped prevent opportunistic behaviour.

It is noteworthy that the critical success factor of SMU stems from the open interactive process of the rural or national development game. However, the RCT has been trying to create a closed and isolated lab situation consistently with the statistical nature of the RCT. Motivation for development, learning from other villages, and cooperation among villagers, all created by rivalry among villages, were critical for the endogenous development process. It may be better to design the RCT to allow the synergistic interaction among the individual participants and the experimental groups to create such an emergent nature of development process. Thereby, the actual relevance of the experiment to development policy may greatly be enhanced.

The RCT is to apply the lab experiment with *unconscious body cells* in medical research to *conscious human society*. The RCT, lacking theory of economic development, may need to incorporate prior knowledge on the government development policy, which can be learned from the trinity development model and the SMU experiences. This paper proposes the ED incentive system can be the essential prior knowledge along the line emphasised by Deaton and Cartwright (2018, p.2), "RCTs can play a role in building scientific knowledge and useful predictions but they can only do so as part of a cumulative program, combining with other methods, including conceptual and theoretical development, to discover not 'what works', but 'why things work'." This paper could add that the SMU discovered '*things work only when the ED incentive policy is adopted and enforced.*'

The trinity model of rural development games directly targets the development performance, the evaluation of which, in turn, becomes the basis for further incentive differentiation for the next round so that the development process is automatically built into the game. *The ED principle of only development rewarded fundamentally differs from the RCT experiment to emphasise the aid or gift-induced development effect, typical with the so-far failure-prone ODA programs of usually giving egalitarian support. The former can generate a development-friendly self-help spirit and behaviour, but the latter may kill those spirits and behaviour. This paper implies that the RCT will be much improved in terms of policy relevance if adds the third intervention group under the ED incentive system, in addition to the ODA-type intervention group and the control group.*

4.5. The ED Institution as the Game Changer in Rural Development.

This paper's key theoretical and policy innovation lies in the ED policy regime. Now one may wonder how the ED institution can help overcome many problems commonly observed in implementing rural development policies in practice. For example, corruption of state leaders, policy-making officials, and even village leaders in charge of rural development, the inactivity of the villagers under the path-dependence of the ideology of blaming others for their misfortunes, political populism of promising free lunch and killing the self-help spirits, etc. have been common in the process of policy implementation, causing policy failure.

This paper argues that all those problems stem from the lack of ED institutions. The ED institution requires transparent and accurate evaluation of the performance and the corresponding fair reward or support. Therefore, once the ED institution is enforced as transparently and thoroughly as possible, there will be no place for such problems in general. Therefore, the government's strict enforcement of ED rules is critical to policy success.

Corruption or nepotism, in fact, stems from no or ill-enforced ED rules in national as well as local levels. Therefore, the ED institution becomes the effective preventer of corruption, nepotism or rent-seeking behaviour in policy implementation. In Korea's Saemaul Undong, the President himself directly monitored the Saemaul Undong and strictly enforced ED rules to prevent such behaviours. The corruption-free state leadership as such is a precondition for policy success.

An enough pool of innovative entrepreneurial village leaders is also critical for success. There is no shortcut for this except for utilising an evolutionary selection process where good leaders spontaneously emerge from inside the community. They should be democratically elected by the general community meeting as the village organisation's top managers but in honorary posts in the sense of no regular monetary compensation. Regular financial rewards would not be advisable to avoid village politics due to election competition but, if necessary, be minimised. Instead, they must be given appropriate incentives by recognising their leadership role. Based on the merit system, they will be given honorary recognition and special prizes for their excellent leadership linked to good village performance compared to other villages nationally. Such rivalry among villages for performance under incentive differentiation will help create an environment for good leaders to emerge. The management of the village organisation must keep to the ED principle, allowing every household an equal opportunity to participate and fair treatment, which helps prevent potential corruption, nepotism, and rent-seeking at the village level. The government must enforce the ED principle in evaluating and rewarding village performance and, on top of the motivational incentives, needs to provide leadership education for village leaders and villagers regularly.

Regarding the issue of activating the villagers' participation, one should note that there could be no purely voluntary participation in cooperative works only by moral suasion, even for one's own benefit. The ED incentive system is the solution for market failure due to externalities, and therefore, it can prevent not only the incentive to free ride but also moral hazard or nepotism. The ED incentive system treating people differently based on performance can wake up their self-help and self-interest instincts and make them move "voluntarily." Any household that opportunistically behaves and free rides must be excluded from the game until it changes behaviour and shows performance. In the case of Saemaul Undong, President Park Chung Hee always declared this principle to the people and enforced it. Thereby, the ED incentive systems help eradicate the incentive for inactivity and eventually help those villagers participate "voluntarily". Peer pressure by the village community members also helps. Even if the government and the village organisation provide the work for income, if some households take opportunistic behaviour, there is no reason to allow them to continue free riding. Only the ED principle can help change their behaviour and eventually make them successful. The ED policy is an effective means to turn failure-prone people into successful ones beyond simple moral suasion. The ED is the policy instrument to save people by declaring to discard them, just like the god who helps those who help themselves.

Therefore, the critical success factor for the trinity model will depend on how to effectively implement the ED policy regime. Above all, the performance evaluation should be fair and transparent, and the discriminatory support should be executed fairly. These are the precondition for guaranteeing people's compliance with the ED rule and the ED

policy's effectiveness and sustainability. It should be noted that if evaluations are unfair and opaque, and discrimination is not fair, then power politics for rent-seeking, moral hazard, and corruption will prevail, and the ED policy will fail. Therefore, implementing the ED rule fairly, transparently, and strictly is the precondition for the overall success of a sustainable poverty eradication and rural development policy. It may be worth noting that the originator of the Saemaul Undong, President Park Chung Hee was the champion of depoliticising the ED rule away from political distortion by the egalitarian policy, thereby paving the road for the Saemaul Undong's success, as already mentioned in Section 2. In fact, President Park Chung Hee stubbornly rejected the anti-ED, egalitarian idea of the cabinet and the political leaders to support all villages equally regardless of their different performances to avoid negative political implications.¹⁹

Finally, one may wonder how the trinity model would work differently under different political regimes or cultures. Note that the new theory of political economy based on GTED implies that as far as the ED institution is kept in place, the type of political regimes may not be as much relevant as usually emphasised in mainstream literature. The ED institution is truly a game changer in economic development. Formal as well as informal institutions (such as customs, cultures, and values) or political as well as economic institutions all need to conform to the ED institution if the society could have any chance to develop.

In this regard, one can understand why and how Korea and China could rapidly grow under authoritarian democracy and the communist regime, respectively. Moreover, it is very interesting to see that Korea achieved shared growth for urban and rural sectors with the success of Saemaul Undong, but China fell short of shared growth due to the limited success of her rural development effort. China adopted the well-known household-based cropping system to prioritise household share over collective one based on harvest performance by reforming the communist collective farming system, together with a corporate-led growth strategy, but because of the lack of enough incentive due to limited private land ownership, it failed to achieve shared growth. Note that the underlying land property ownership behind the success of Saemaul Undong was full private ownership, but China is still under the collective land ownership system. Therefore, China failed to replicate Korean Saemaul Undong to the fullest. In the end, Korea achieved shared growth, but China had a high but polarised growth between the rural and urban sectors. However, now Korea faces a new era of economic egalitarianism²⁰. China also seems at the juncture of turning back to a socialist egalitarianism by reversing the ED policy regime, which has brought current prosperity.

5. CONCLUDING REMARKS

The central message of this paper can be summarised as follows. Rural community development programs including poverty eradication, which aim at individual households or a small number of model villages according to the market-centric economics perspective, tend to deemphasise the active role of the government and the village organisations while

¹⁹ See Jwa (2017a, 2017b, 2018b) for this episode.

²⁰ See Jwa(2017b, 2020) for the history of Korea's rise and fall of economic development in recent decades.

deifying the market. However, those programs are destined to fail to create spillover effects for the whole community or all communities due to various obstacles such as high information/transaction costs-led market failures and behavioural path-dependence in rural society. Free markets alone are, therefore, not an effective solution to sustainable poverty alleviation and rural development.

To deal with this problem, designating the village organisation as an entity to monitor villagers' participation and performance and internalise their moral hazard behaviours that lead to market failure, such as opportunistic free-riding behaviour, can increase the program's probability of success. Ultimately, the government-led ED policy can be added as the game rule for the performance competition to complete the trinity model for sustainable poverty eradication and rural development. Besides, the education program for mindset reform will be required for visible and sustainable results.

Together with these formal and informal institutional reforms, the government should finance the village infrastructure projects to be managed by the village units and cooperatively carried out by the village members to generate income for village units and villagers and to modernise the living conditions of the villages simultaneously. In addition, these income-generating infrastructure projects can create spillover effects from the initial income-saving-capital accumulation to the investment into new farming businesses, further income-saving-capital accumulation, and reinvestment, leading to further positive feedback cycles.

Therefore, the trinity model can bring about sustainable, inclusive, and shared growth via the collaborative development action of all community members driven by the government and community together. Moreover, the trinity model suggests that the RCT experiment can be made more development-relevant by adding a new intervention group subject to the ED rule helping only those who perform well to the existing ODA-type intervention group receiving the egalitarian support disregarding the performances. In sum, the ED institution can help innovate the economic development theory and policy.

REFERENCES

- Acemoglu, D., & Robinson, J. A. (2012). *Why nations fail: The origins of power, prosperity, and poverty*. Random House.
- Alchian, A. A., & Demsetz, H. (1972). Production, information costs, and economic organization. *The American Economic Review*, 62(5), 777-795.
- Banerjee, A. V., Duflo, E., & Kremer, M. (2016). The influence of randomized controlled trials on development economics research and on development policy. Paper prepared for *The State of Economics, The State of the World Conference proceedings* volume.
- Beinhocker, E. (2006). *The origin of wealth: Evolution, complexity, and the radical remaking of economics*. Harvard Business School Press.
- Deaton, A., & Cartwright, N. (2018). Understanding and misunderstanding randomized controlled trials. *Social Science & Medicine*, 210, 2-21.
- Eggertsson, T. (1990). *Economic behavior and institutions*. Cambridge University Press.
- Gneezy, U., & List, J. A. (2013). *The why axis*. NY: Public Affairs.
- Jwa, S. H. (2017a). *A general theory of economic development: Towards a capitalist manifesto*. Edward Elgar Publishing.

- Jwa, S. H. (2017b). *The Rise and Fall of Korea's Economic Development: Lessons for Developing and Developed Economies*. Cham, Switzerland: Palgrave Macmillan.
- Jwa, S.H. (2018a). Achieving the shared economic growth. *The Pakistan Development Review*, 57(1), 45–71.
- Jwa, S. H. (2018b). Understanding Korea's Saemaul Undong: Theory, evidence, and implication. *Seoul Journal of Economics*, 31(2), 195-236.
- Jwa, S. H. (2020). Theory and empirics of the institutional evolution of economic development: An application to Korean economy. *Seoul Journal of Economics*, 33(2), Summer.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), March, 263-292.
- Kretzmann, J., & McKnight, J. (1993). *Building communities from the inside out: A path toward finding and mobilizing a community's assets*. ACTA Publications.
- Levitt, S. D., & Dubner, S. J. (2005). *Freakonomics: A rogue economist explores the hidden side of everything*. NY: William Morrow.
- Mitchell, S., Gelman, A., Ross, R., Chen, J., Bari, S., Huynh, U. K., Harris, M. W., Sachs, S. E., Stuart, E. A., Feller, A., Makela, S., Zaslavsky, A. M., McClellan, L., Ohemeng-Dapaah, S., Namakula, P., Palm, C. A., & Sachs, J. D. (2018). The Millennium Villages Project: A retrospective, observational, endline evaluation. *The Lancet Global Health*, 6(May), e500-e513. [https://doi.org/10.1016/S2214-109X\(18\)30065-2](https://doi.org/10.1016/S2214-109X(18)30065-2)
- North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.
- North, D. C. (1992a). Institutions, ideology, and economic performance. *Cato Journal*, 11(3)
- North, D. C. (1992b). *Transaction costs, institutions, and economic performance*. Occasional Papers/International Center for Economic Growth; No.30, An International Center for Economic Growth Publication. San Francisco, California.
- North, D. C. (1993). The new institutional economics and development. *Economic History*, 9309002. University Library of Munich, Germany.
- Park, C. H. (1979). *Saemaul: Korea's new community movement*. The Secretariat for the President, the Republic of Korea. Seoul: Korea Textbook Co., Ltd.
- Park, J. H. (2005). *President Park Chung Hee's Korean economic modernisation and Saemaul Undong*. President Park Chung Hee Memorial Association.
- Sachs, J. (2018). Lessons from the Millennium Villages Project: A personal perspective. *Comment, The Lancet Global Health*, 6(May). Retrieved from [file:///G:/showPdf\(evaluation%20on%20MVP\).pdf](file:///G:/showPdf(evaluation%20on%20MVP).pdf).
- Sachs, J., & Mitchell, S. (2018). The Millennium Villages Project: Authors' reply. *Correspondence, The Lancet Global Health*, 6(July). Retrieved from www.thelancet.com/lancetgh.
- Schumpeter, J. A. (1974). *The theory of economic development*. (R. Opie, Trans.). Oxford University Press. (Original work published 1934).
- Simon, H. (1991). Organizations and markets. *The Journal of Economic Perspectives*, 5(2), 25-44.
- Smiles, S. (2008). *Self-help; with illustrations of conduct and perseverance*. Rockville, MD: Serenity Publishers. (Original work published 1859)

- Stoltenberg Bruursema, C. (2015). Asset-based community development: A path toward authentic community development practice. *SPNHA Review*, 11(1), 84-112.
- Stratieva, N. (2018). Capitalist economic development. *Asian Journal of Law and Society*, 5(2), 474-477.
- Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. Penguin Books.
- The Committee for the Prize in Economic Sciences in Memory of Alfred Nobel (2019). *Understanding development and poverty alleviation*.
- The Earth Institute (Home Page) at Columbia University, *Millennium Village Projects*. (n.d.). Retrieved from <https://www.un.org/esa/coordination/Alliance/Earth%20Institute%20-%20The%20Millennium%20Villages%20Project.htm>
- Tversky, A., & Kahneman, D. (1981). The Framing of Decisions and the Psychology of Choice. *Science*, New Series, 211(4481), 453–58.
- World Bank. (1993). *The East Asian Miracle: Economic growth and public policy*. New York: Oxford University Press.