

# Effects of Rural Industrialisation on Rural Development: A Case Study of Lianyungang (China)

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**ABSTRACT:** China has seen massive and viable growth in recent years owing to different factors which has increasingly contributed to China's economic development. Even though this was supposed to be of enormous joy for the country, a retarding trend, that is a widening gap between rural and urban development has been identified, resulting in the pressure mounting on rural dwellers to shift to the urban settings to tap from the benefit of urban growth. The excruciating result is the deepening of the gap between the local and urban standard of living and general wellbeing. One strategy suggested by scholars to help bridge this gap is to increase efforts geared towards rural industrialization.

It is against this background that this study was conducted to examine the effect of rural industrialization on rural development. The study used Statistical Package for Social Scientist (SPSS) and Microsoft Excel to conduct both descriptive and inferential analysis like mean, standard deviation, and graphical representation, t-test, Correlation, Multiple Regression Analysis, R-Square, F-statistics and Variance Inflation Factors (VIF) to establish the linkage between rural industrialization and general livelihood of two thousand (2000) rural dwellers in the Lianyungang community in the northeastern Jiangsu Province of China.

The finding of the study supported available literature and confirmed that rural industrialization is fundamental to rural development if properly implemented and monitored. The study also pointed out that rural industrialization in itself alone is not enough to solve the problem of rural development but must be combined with stringent macro-economic policy frameworks which will improve the social conditions of rural dwellers.

## I. INTRODUCTION

Industrialization has been known to be a key contributor in development the world over.

Apart from creating employment, it also helps in the redistribution of wealth and help bridge the economic gap among citizenry. One problem identified over the years is that industrialization is more centered in urban areas than rural areas, thereby leading developmental disparities.

Rural industries render a momentous impact in the progress of countries. Industrialization of rural communities do not only primes an increase in per capita income and intensification of living conditions of the individuals by generating applicable employment openings for them, but also causes lessening in income disproportions between rural and urban areas. The enlargement of industrialization in rural communities is thus regarded as indispensable in making use of resources to serve local needs (Kapur, 2019)

Briones (2017) mentioned that rural areas are characteristically concomitant with agricultural activities, while non-agricultural activities seem to amass in borough centres. To Jones and Corbridge, (2010) this prejudice against rural industrialization and the rural economy has persisted in current development thinking and policy.

The above bias has led to the theory of integrated rural development (IRD) which has been extensively looked at in literature as the most potent antidote to the development disparity and the able tool developing countries can use to fight hunger, underemployment and over-dependence, especially in the rural settings hence the attempts by governments the world over to revise and redirect their economic plans to pay more consideration to the rural settings.

China is no exception to the urban-rural disparities identified above. Urbanization process vastly boosted in lieu to the implementation of the Economic Reforms, leading to large-scale rural-urban migrations (Song et al., 2012). Lu and Wang (2006) approximated that rural-urban migrations accounted for 79% of China's borough population

progression from 1979 to 2003. This rural-urban movement is largely attributed to the existence of wide income disparities among rural and urban dwellers. This was clearly visible, for instance in the 1980 where the per capita disposable income of metropolitan households stood at 477.6 yuan while that of bucolicho use holds was 191.3 yuan. Estimates have it that this gap will keep widening and will attain a ratio exceeding 3:1 (China Statistical Yearbook, 2010).

To help curb this widening urban-rural disparity in living conditions, the Chinese government has instituted many agendas over the years to help in the development of rural areas while also improving the general wellbeing of locals. One of such strategy is the Town-and-Village Enterprises (TVEs) whose target was to advance the industrialization of rural regions by making the ranchers leave their rice-fields without leaving hometown” and “move to manufactories without moving into cities. That the country share in Chinese assembling yield developed from 14.3% in 1980 to 70.4% in 2002 shows that such firms have had the option to ingest or make occupations from enormous urban areas, and may recommend that industrialization emerged all over China. As seen by Putterman (1997, p. 1643), "the appropriation of TVEs is very focused, with most of municipality and town endeavor yields being delivered either in the rural regions inside more seasoned city limits, or in the provincial districts neighboring regions." In a similar vein, the top to bottom examination embraced by Kung and Lin (2007) uncovers that the improvement of most TVEs happened in beach front zones. Thus, to a fairly large extent, rural industrialization has occurred in regions that have also experienced a fast growing urbanization. That is to say that attempt by succeeding governments is not yielding the intended results. Hence the need for an investigation to identify way of realigning government policies to attain their objective of rural poverty alleviation and infrastructural development which will in turn curb the massive rush of the locals to urban settings.

### Study Objectives

The objectives tackled by this paper are as follows:  
To examine the effect of rural industrialization on the general livelihood of Lianyungang community  
To identify effects of rural industrialization on rural development in Lianyungang community.

### Hypothesis

**H1.** There is a positive relationship between rural industrialization and the general livelihood in Lianyungang community

**H2.** Rural industrialization positively affects social infrastructure development in Lianyungang community.

### Significance and Scope of the Study

The study holds so many prospects for firms, society, researcher and governments alike. The study will reveal the flaws in policies on merging the gap between urban and rural development and how best to mend them hence eliminating rural-urban drift.

The findings of this study will also provide the bases for setting and implementing the right policy instrument to improve rural enterprise financing and regulation which seems to be missed in literature. The study will add up to the literature available on the topic while exposing diverse areas that can be explored by researchers.

This study limited to the rural industrialization, a review of the rate of rural industrialization in china, mitigating factors of rural industrialization, effect of rural industrialization on the livelihood of the local indigenes as well as means of improving the overall rural development from an interpretivist perspective which will offer explanations to the implementation.

## II. LITERATURE REVIEW

This chapter review empirical and theoretical literature on rural development, its origin, theories supporting it and its evolution over the years.

### Introduction to Rural Development

The overall purpose of development assistance is to improve the livelihoods of citizens in recipient countries, especially the impoverished. Poverty reduction is internationally recognized as an important assistance issue and discussed over the years.

### Definition of Rural Development

Atkinson, (2017) defined rural development to involve struggles that are economic and social in nature intended to encourage concepts of retention, growth, and expansion in areas outside cities, including improving quality of life for rural residents through such activity. To Ahmed et al., (2011) rural industrialization means technical changes to improve quality of life for current generations. Makinde & Makinde (2019) posited that rural industrialization presages that its sole objective should be enriching the rural lot by tapping the enormous material and human resources prevailing in the local areas. They further

elaborated that the process of rural industrialization should have its own features such as labour intensity, low investment of capital and the exploitation of simple technology by engaging local human and material means. The categorization of rural communities varies from one country to another despite the presence of some common parameter that it is usually used in differentiate locations that do not bear common characteristics with urban settings. Japan or instance demarcated rural community based on population concentration, designating that “a rural area is a place with over 5,000 people, which consists of each district with a population density of over 4,000 per square kilometer”(JICA, 2015). This definition is very typical to Japan and cannot apply to other countries mainly due to the variety of demographic and socio-economic indicators across countries. The meaning of the expression "rural" is accordingly a relative idea to "urban", in view of social, financial, and regular conditions in every single area being taken a gander at. The Organization for The Organization for Economic Co-operation and Development (OECD) set forward an argument as to whether or not improvement in rural territories was a territorial or sectorial issue, eventually verifying that it was a spot based inquiry instead of a topic best managed through the imposition of policies (OECD 2003).

### Effective Approaches for Rural Development

Prominent among several theories of rural development that have evolved over the years is the trickle-down theory which was grounded on the belief that abroadened large scale economy could propel the expectations for everyday comforts of oppressed individuals. However, its fiasco does not unavoidably mean that efforts should be concerted at the local levels only owing to the fact that the growth of rural areas cannot be attained without attention to urban areas, which are the main patrons of agricultural products. If conformist expansion projects were to be effective, rural poverty would have improved more significantly. Therefore, it is clear that the customary rural development approaches need to be improved

### Approaches to Rural Development Sectorial Approach

In the time frame following the Second World War there were overpowering needs that directed the methodologies taken to farming approach. These were driven by a need to guarantee homegrown food security and the focal part of horticulture in rural economies as reflected, for example, in the examination and finishes of the

Scott Report (Committee on Land Utilization in Rural Areas, 1942). This put support for the agrarian area at the focuses and guaranteed a methods for meeting an assortment of targets for food security, rural turn of events, ranch livelihoods and ecological assurance all the while through a solitary horticultural strategy approach. In this model, farming addresses the significant area in the country economy and its prosperity decides the presentation of the nearby economy all the more by and large.

### Multisectoral Approach

Along these lines, support coordinated solely through the agrarian area confronted expanding exchequer costs regarding managing the rural overflows that can result from expanded creation and with the declining relative significance of horticulture inside rural zones which can have less and less nearby monetary effect all the more for the most part. This proposes another option, multisectoral approach. The moderately little commitment of agribusiness to numerous rural regions implies unavoidably that other financial areas have come to assume an expanding part in the provincial economy. Amusement and the travel industry and all the more by and large the assistance and modern areas have gotten prevailing. With a proceeding with strategy center around supporting homestead salaries, strategy hence started to look for different methodologies and in the later 1980s ranch "broadening" turned into the "popular expression in approach circles" (Newby, 1988)

### Territorial Approach

Notwithstanding, all things considered, such a methodology is just in part "multisectoral". A genuinely multisectoral way to deal with rural improvement strategy would look all the more by and large and similarly at the real and possible parts for different areas in provincial regions. While situated in country zones, these will regularly have no financial linkages at all with farming. The concentrate hence moves towards a more broad investigation of conditions inside specific sorts of territory, or a regional methodology. What's more, by and by, this implies an attention on country territories. Provincial zones can offer alluring areas for the foundation of new monetary movement, regularly connected with the most progressive areas of an advanced economy, for example, in data innovation, and numerous zones have acquired work from the foundation of new firms and sorts of business (Keeble and Tyler, 1995; North, 1998). This mirrors the by and large

declining meaning of transport costs in modern creation, the appeal of living in provincial territories and the blockage expenses of metropolitan areas. These financial changes in country regions have been related with the breakdown of longstanding organizations and linkages, for example, related with the inventory of rural data sources and the promoting of horticultural items. In a setting of relative horticultural decay, the importance and entrance of agrarian standards is reduced inside the more extensive local area and this has not been supplanted by any elective single prevailing point of view. Practically speaking, we can perceive country zones in a wide range of conditions and confronting very various kinds of issue.

#### Local Approach

A reaction to such factors might be to receive a "neighborhood" or even a "singular" approach. On a basic level, assets should be coordinated towards specific issues at the individual family or business level. This is unmistakably an inconceivable assignment for a focal or government and demonstrates the prerequisite for decentralization of dynamic. However, it might in any case not be attainable for a local government and may request a much more confined methodology. What is required is some system for associating the targets and assets that are given for improvement strategy at the public level to the issues and needs that apply at the individual level. This is basically an issue of data. The intricacy of the issues and the lessening of conventional farming connections have expanded the consideration given to the job of social capital and organizations in the conveyance of rural turn of events (Lee et al.,2005)

#### Policy Indicators and Analysis

Changes in the nature and example of rural advancement have significant ramifications for provincial examination and strategy assessment. In the positivist custom (Weimer, 1998) strategy assessment is embraced to test the proficiency and adequacy of explicit public activities intended to accomplish social government assistance benefits. For assessment to work, along these lines, strategy goals should be unambiguously expressed, and causal components should be plainly perceived. The last is especially significant since different occasions or cycles as opposed to the actual arrangement may influence the result. Progressively, in this way, and particularly in the investigation of country improvement, there has

been a quest for approving measures, or pointers, which can segregate whether strategy activity has been defended.

#### Rural Development in China

The People's Republic of China (PRC) has experienced unmatched economic evolution and over the last 30 years owing to reforms and the opening up of their economy. The urban settings have however been the main beneficiaries of these economic upsurge pushed economic growth and livelihood of the residents to high levels. The urbanization process tends to result in further clustering of economic advancement to urban areas. As urbanization assumes a vital responsibility in accumulated impacts and urban areas make a significant commitment to the development of assembling and administrations, the PRC's levels and speed of urbanization should be painstakingly considered to survey urbanization's monetary maintainability and potential. According to the "dual economy theory" propounded by Lewis (1954), in the urbanization process, industrialization and urbanization levels should rise all the while to make capital gathering and the change of country work to modern areas conceivable. However, in the PRC, urbanization lags far behind industrialization, necessitating the need for examining this gap to determine how better and healthier urbanization can be accomplished. To attain the above key rural urban migration and development indicators like urbanization, migration, and remittance and their effects on productivity, capital investment, and agricultural organizations in rural areas has to be critically studied.

The government of China has consistently positioned extraordinary significance on work identifying with horticulture, provincial regions, and the rural populace. Since the assembling of the Sixteenth National Congress, the public authority has carried out a progression of arrangements to reinforce farming, advantage the country populace, and empower individuals in rural zones to flourish and subsequently guaranteeing adjusted improvement of metropolitan and provincial territories. These efforts have brought about remarkable advances in China's agricultural and rural development (JICA, 2015).

Provincial incomes have kept on rising quickly, fundamentally improving the rural expectations for everyday comforts. There is a consistent expansion of provincial livelihoods as the main concern in the objective of identifying with country zones, and we have bent over backward to make more approaches to increment



rural pay. The per capita net rural income of China having expanded consistently in the course of recent years, is expected to surpass 6,900 yuan in 2021. This will be a huge increment of in excess of 4,400 yuan over that of 2002, a normal yearly increment of 7.9% determined at tantamount costs. Is really promising that the pay hole among metropolitan and rural territories started to give indications of narrowing in 2010. The expectations for everyday comforts of the country populace have remarkably improved and are proceeding to improve (JICA, 2015).

### Empirical Review

Proof all through writing has demonstrated that modern turn of events, particularly agrarian advancement is fundamental in aiding the poor either straightforwardly by expanding the livelihoods of the helpless who ranch and in a roundabout way by delivering work and capital that can be utilized in non-farming undertakings and by moving the interest for non-horticultural merchandise (Lipton and Ravallion, 1995; Johnson 2000, Lanjouw and Lanjouw, 2001). The above goes to emphasize the positive relationship between rural development and rural industrialization.

The deliberation on which strategy is most appropriate for rural development is still in the academic sphere partly owing to the fact that empirical evidence on the relative efficacy of farm and non-farm growth as sources of reduction in rural poverty and inequality is limited and inconclusive. Using cross-country data on sectoral GDP and income, Timmer (1997) and Deininger and Squire, (1996) concluded in their studies that income increment across the income distribution do not depend on the source of growth.

The works of Ravallion and Datt (1996, 1999) portray the sturdiest evidence on the effects of sources of growth on rural poverty and inequality by using a state-level data set from India that combines multiple national-level cross-sectional domiciliary surveys with state-level aggregate data on sectoral income. They came out with evidence that supports the fact that the growth of agricultural and its related industry minimizes rural poverty with a more mixed picture of the effects of non-agricultural growth, with overall effects depending, among other things, on initial conditions.

The higher wage in larger cities is a reflection of their productivity gains. The average output and wage level are higher in big-sized cities than in small-sized cities (Sveikauskas 1975). The doubling of city size will increase productivity of

labor by 4.77%–6.39%. The relationship between urban size and labor productivity also holds in the PRC. Au and Henderson (2006) pointed to an “Inversed-U shape” relationship between urban size and income per capita, indicating a positive relationship in the early stages of city development.

Urban agglomeration can largely improve labor productivity through the mechanisms of sharing, matching, and learning. Through these mechanisms, enterprises can reduce production costs by achieving economies of scale. Big cities supply more diversified products to meet the demands of consumers. Workers find it easier to get jobs, gain experience, and acquire knowledge in big cities. Of the three mechanisms of sharing, matching, and learning, sharing in cities has resulted in economies of scale, especially for transportation infrastructure facilities, and diversified consumer goods. As the benefits of sharing are more obvious, recent empirical research has focused on the mechanisms of matching and learning Chen et al., (2016).

A sound development cannot be specified purely in economic terms but must include some other indicators such as adequate educational level, freedom of speech, citizenship of nation that is truly independent both economically and politically etc. Rural industrialization is defined as a strategy designed to improve the economic and social life of a specific group of people in the rural poor. In the less developed and developing countries, most of people have been living in rural areas and engaged in agriculture. That is why the major development challenge of these countries is the development of agricultural structure and improvement of the life standards of the people engaged in agriculture (Harriss, 1992).

Ayyar (2011) posited that the extent of rural industrialization is viewed fundamentally as an issue of appropriately using the rich yet unexploited public assets in the rustic zones. It is a cycle worried about the inclusion of businesses in the advancement of a space and furthermore cooperation by provincial business visionaries in the development of enterprises most appropriate to that particular territory. The interaction of country industrialization, in any case, is recognized from the circumstance under which certain businesses are relocated in a particular rustic territory. According to economic growth theory, higher earnings translates into higher savings, and thus investment intensifications. The income of industrialized rural inhabitants is expanded and more capital can be contributed to improve the framework, training and medical services. The existence nature of industrialized country

inhabitants will moderately improve than the rustic class. Industrialization is the rearrangement of assets. To fulfill the interest for qualified works, the non-horticultural area needs instructive administrations. Consequently an assortment of instructive and preparing establishments in such regions will be created. This thus permits them to improve occupations and get higher pay. Simultaneously, industrialization prompts the interest for assets in metropolitan area and it can give better re-visitations of the assets. So the capital streams from provincial regions to urban regions. (QuanbaoLi and Yan Yan, 2011).

### **Innovation as a Factor in Rural Industrialization**

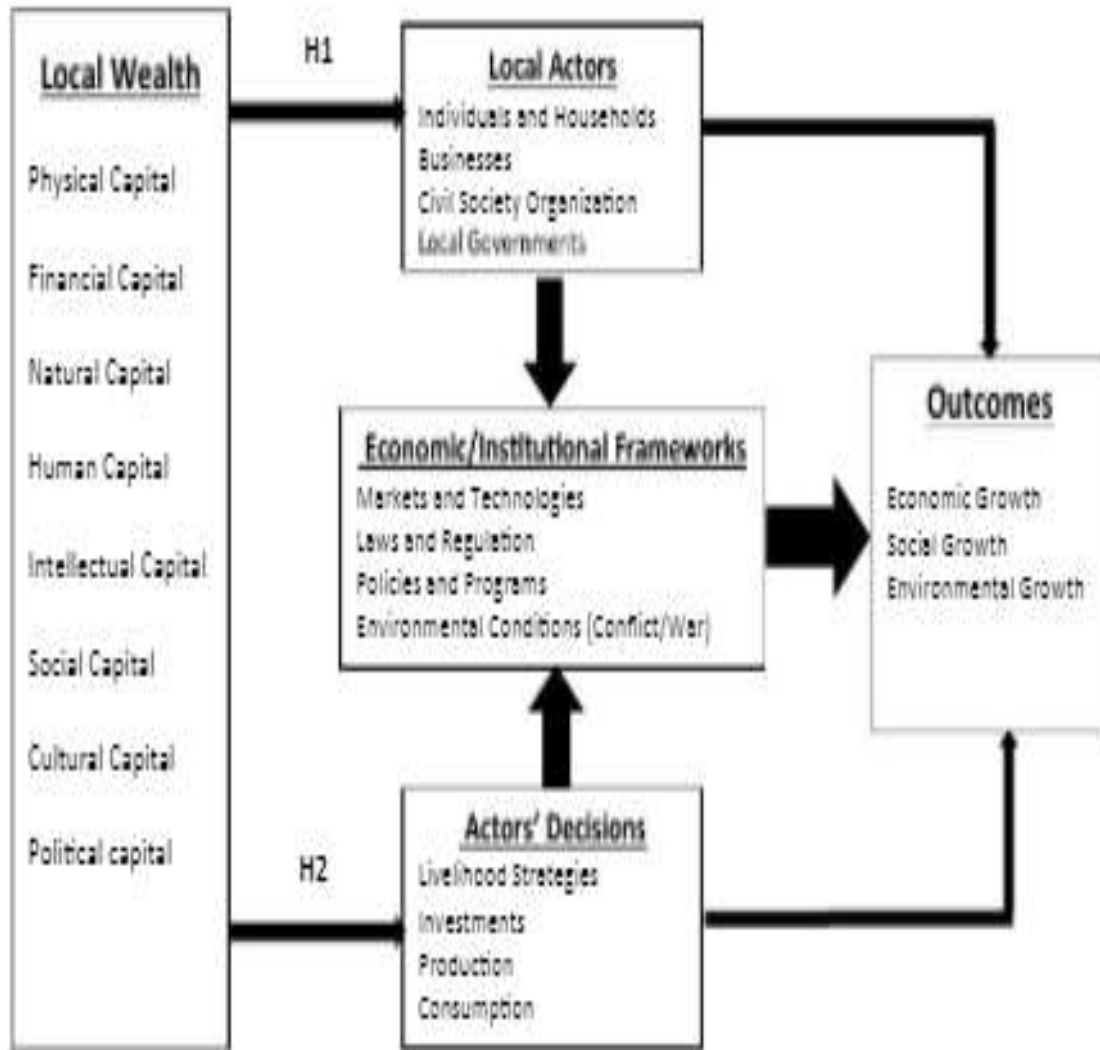
According to Hall, (2004) advancement should prompt social and monetary change, because of innovative and institutional turn of events. Institutional industrialization implies better approaches for getting things done, new standards, better approaches for conveying science, and better approaches for guaranteeing that poor stakeholders' needs are tended to. The open finished interaction of development can be a test to numerous associations and social orders, which are utilized to standard administration rehearses that control straight cycles with anticipated results. Development in industrialization is to some degree not quite the same as that in the private area (Kelles-Viitanen, 2005). The private area centers basically around item improvement. Being developed we likewise need to create systems and new, regularly coordinated methodologies that have an effect in destitute individuals' vocations. Vocations are likewise established in social orders and along these lines social change is a piece of

any feasible objective. On a basic level, everybody appears to concur that development is something to be thankful for. By and by, development may not be welcome to all individuals (Kelles-Viitanen, 2005). Development agitates old examples of reasoning and working. This can be a test to the state of affairs and personal stakes (Pavitt 2003). As per Kelles-Viitanen, (2005) development in light of a legitimate concern for the rustic poor can even create struggle. An advancement cycle needs to conquer clashes, persuade individuals that must be convinced and build the alliance necessary for the action to succeed. Information and advancement is additionally an administrative issue requiring some defending. It is likewise a patent issue, as it has been noticed that the shortfall of monetary and hierarchical skills of the native and nearby individuals to screen and authorize licenses in present day financial space will unavoidably prompt the utilization of their insight without due pay (Pretorius, 2002). Their insight and advancement, in this manner, should be secured through multilateral acknowledgment of their privileges, including through TRIPS (Trade-Related parts of Intellectual Property rights in WTO.). There is need to address the necessities of the rustic poor, to work with them and to advance nearby pioneers and perceive ranchers and other provincial individuals as authentic specialists in the space where they work. there is need to help and serve to upscale imaginative and effective nearby activity and move from issue based projects towards reinforcing the answers for be found in neighborhood networks, expanding after existing qualities and activities and supporting development (Barnett 2004).

### **Conceptual Framework**

The linkage between the key concepts the study aimed to look at is diagrammatized in the conceptual framework below:

Figure 2.1 Conceptual Framework



### III. METHODOLOGY

This section of the study discusses the methods employed by the researcher to attain the objectives set out. The section looks at the methodological fit of the study. Method is a style of conducting a research work and is determinate by the nature of the problem. Keeping the nature of the problem in mind, the researcher carried out the present study on the lines of Descriptive Survey Method.

#### Population of the Study

The population of the study is the Lianyungang community locality in the

northeastern Jiangsu Province of China. The population is mainly involved with agricultural, forestry and animal husbandry, mining, manufacturing, food processing, textile and leather works, metal industry, electrical, machinery and equipment, construction, transport, information technology (IT), hospitality, services and commerce industries.

#### Sample Size and Sampling Technique

The sample of the study was drawn from the population using simple random sampling in order to avoid biases in selection of respondents. Two thousand (2000) residents were selected using

convenience sampling method. To measure the effect of rural industrialization on rural livelihood and development, a 5-point Likert-type scale was developed following the work of Covin and Slevin 1990 cited in Etriya et al., 2012). Questionnaires were used as the research instrument of data collection. Validity and reliability was achieved using face validity test and Cronbach alpha test respectively. Questions asked are directly linked with the objectives set out by the study. Descriptive statistics comprising mean scores and standard deviations and inferential statistical techniques comprising regression will be used.

**Method of Data Analysis**

The study was descriptive in nature, explaining the relationship between variables. Statistical Package for Social Scientist (SPSS) and Microsoft Excel were used to conduct both descriptive and inferential analysis. The descriptive statistics include mean, standard deviation, and graphical representation while the inferential analysis included t-test, Correlation, Multiple Regression Analysis, R-Square, F-statistics and Variance Inflation Factors (VIF).

**IV. DATA ANALYSIS AND PRESENTATION**

The chapter presents the analysis and discusses the results of the study. The study examined the effect of rural industrialization on rural development and considered a sample size of 2000 respondents. Some analysis conducted include; Exploratory Factor Analysis (EFA), mean score analysis, Correlation analysis, and Regression analysis.

**Reliability and validity of the study**

Validity discloses how much an overview instrument really gauges what it implies to quantify (Fink, 2003). The investigation utilized informative factor examination to check legitimacy of the exploration develops. Unwavering quality is regularly use to quantify inside consistency of the

exploration develop. A scale is said to have high inner consistency unwavering quality if the things of a scale measure comparative build (Robinson, 2009). The generally use instrument for inward consistency measure is the Cronbach's alpha coefficient. The study therefore employed Cronbach's alpha coefficient to test for the reliability of the data collected. The minimum acceptable internal consistency should have Cronbach's alpha coefficient of 0.7 (Hair et al., 2014).

The principle component method was used for an explorative factor analysis. 5 items were loaded each into the system. Exploratory factor analysis was used to test the construct of Rural Industrialization and General Livelihood. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .791, p-value = .000 and a factor was extracted with total variance explained as 69.5% (Pallant, 2007). The items under the dimension of Rural Industrialization and General Livelihood were maintained. Cronbach's alpha value for Rural Industrialization and General Livelihood was .859, which is higher the suggested value of .70 (Nunnally, 1967). All the variables under Rural Industrialization (RI) and General Livelihood construct loading had their respective coefficient above .70.

Exploratory factor analysis was used to test the construct of Rural Industrialization and Social Infrastructure Development. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .784, p-value = .000 and a factor was extracted with total variance explained as 67.8% (Pallant, 2007). All items under this dimension of Rural Industrialization and Social Infrastructure Development was maintained. Cronbach's alpha value for Rural Industrialization and Social Infrastructure Development was .804, which is higher than the suggested value of .70 (Nunnally, 1967). All the variables under Rural Industrialization and Social Infrastructure Development construct loading had their respective coefficient above .70.

**Table 4.1 Exploratory factor analysis for Rural Industrialization (RI) and General Livelihood**

Item	Factor	N	Cronbach's
Factor Loadings	Loadings		Alpha $\alpha$
		5	.859
RI improves your financial status	.719		
RI ensures improvement in social infrastructure	.811		
RI ensures improvement in health care delivery	.732		
RI improves general education level in my community	.789		



RI ensures sufficient food and nutrition. .821

Source: Field work, 2021

**Table 4.2 Exploratory factor analysis for Rural Industrialization (RI) and Social Infrastructure Development**

Item	Factor	Factor Loadings	N	Cronbach's Alpha $\alpha$
			5	.804
RI helps in improving energy supply to the local community		.716		
There is an improved ICT infrastructure due to RI		.708		
RI brought good road network to Lianyungang community		.774		
RI has significantly improved employment rate in.		.792		
RI has improved the general economy of Lianyungang		.735		

Source: Field work, 2021

### Descriptive Statistics

This aspect of the study examined the mean analysis of the variables of the study. The study found a composite mean score and standard deviation of 4.12 and .597 respectively for Rural

Industrialization. The study found a composite mean score and standard deviation of 4.01 and .658 respectively for General Livelihood. The study again found a composite mean score and standard deviation of 3.96 and .861 respectively for Social Infrastructure Development.

**Table 4.3 Descriptive Statistics**

Item	N	Min	Max	Mean	Std. Deviation
<b>General Livelihood</b>	2000	1	5	4.12	.597
<b>Social Infrastructure Development</b>	2000	1	5	4.01	.658
<b>Rural Industrialization</b>	2000	1	5	3.96	.861

Source: Field Survey (2021).

### Correlation Analysis

Table 4 presents correlations among the variables of the study. The study found that Rural Industrialization correlated positively with General Livelihood ( $r = .591, p < 0.01$ ). The study also found that Rural Industrialization correlated positively with Social Infrastructure Development

( $r = .522, p < 0.01$ ). The study again found that General Livelihood correlated positively with Social Infrastructure Development ( $r = .453, p < 0.01$ ). None of the correlation values exceeds the critical value of 0.90, indicating no multicollinearity problem (Masud, 2017).

**Table 4.4 Correlation Matrix**

	Mean	SD	1	2	3
RI	4.12	.597	1		
GL	4.01	.658	.591**	1	
SID	3.96	.861	.522**	.453**	1

\*\*Correlation is significant at the 0.01 level (2-tailed).

RI = Rural Industrialization, GL = General Livelihood, SID = Social Infrastructure Development

Source: Field work, 2021

### Regression Analysis

This section of the study presents the regression analysis as well as test the hypothesis of the study.

**The effect of rural industrialization on the general livelihood in Lianyungang community**

The study sought to analyze the effect of rural industrialization on the general livelihood in Lianyungang community. The result of the regression analysis from table 4.6 indicates that, rural industrialization has a significant positive impact on general livelihood in Lianyungang community ( $\beta = .597$ ,  $t = 9.486$ ). Therefore, the

hypothesis 1, that there's a significant positive relationship between rural industrialization and general livelihood in Lianyungang community is supported. The R square of .617 indicates 61.7% of the variance in general livelihood in Lianyungang community can be predicted by the rural industrialization (Table 4.5).

**Table 4.5 The Model Summary**

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.724 <sup>a</sup>	.617	.603	4.163

- a. Predictors: (Constant), Rural industrialization
- b. General livelihood

Source: Field Survey (2021).

**Table 4.6: Coefficients of Regression Model.**

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.197	2.126		3.596	.000
	Rural industrialization	.597	.058	.786	9.486	.000

- a. Dependent Variable: General livelihood

Source: Field Survey (2021).

**The Effect of Rural Industrialization on the Social Infrastructure Development in Lianyungang Community**

The study sought to analyze the effect of rural industrialization on the social infrastructure development in Lianyungang community. The result of the regression analysis from table 4.8 indicates that, rural industrialization has a significant positive effect on social infrastructure

development in Lianyungang community ( $\beta = .492$ ,  $t = 6.842$ ). Therefore, the hypothesis 2, that there's a significant positive relationship between rural industrialization and social infrastructure development in Lianyungang community is supported. The R square of .596 indicates 59.6% of the variance in social infrastructure development in Lianyungang community can be predicted by the rural industrialization (Table 4.8).

**Table 4.7 The Model Summary**

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.685 <sup>a</sup>	.596	.589	2.325

- a. Predictors: (Constant), Rural industrialization
- b. Social infrastructure development

Source: Field Survey (2021).

**Table 4.8: Coefficients of regression model.**

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1	(Constant)	7.587	3.524	2.138	.000
	Rural industrialization	.492	.091	6.842	.000

a. Dependent Variable: Social infrastructure development

Source: Field Survey (2021).

### V. CONCLUSION AND RECOMMENDATIONS

This final section of this paper summarizes the findings of this study and then laid the theoretical contribution of the thesis and provides implications of the study based on the results obtained.

#### Main Findings

The finding of this study was centered on the contributions of rural industrialization on rural development. It was examined that there is a strong linkage between rural industrialization and rural development as shown by the testing hypothesis confirmed. This goes to suggest that for an accelerated integrated rural development to be attained and policies on rural development to be attained, there is the need for a paradigm shift of locating environmental welcoming activities in rural areas in order to bring about development for nearby villagers. This stemmed from the fact that the location of industries in localities bring with them the benefits of job creation in rural area, raising the income of rural people, improved crofter income, increase social indemnification, creation of temporary employment as well as the long term of increased motivation to stay in rural areas, thereby helping to curb the problems associated with rural-urban drift owing to lack of development in the rural settings.

The study also revealed that rural industrialization is the surest bet of preventing rural issues such as social and economic development, income difference between rural and urban families, increase of unemployment in labour force and migration as a result of unemployment problems. With rural industrialization and expansion of industrialization efforts to the rural areas, there is the certainty of bridging the gap between rural and urban dwellers. Thus the

improvement and extension of social insurance and income permanency is greatly associated with it. Simply put, industrialization is the surest slant to achieving sustainable development and augmented social and economic growth.

The above finding agrees with earlier studies like that of Kumar, (2006) which concluded that the China's TVEs growth and development have undoubtedly attracted great attention from the world and has also provided a specimen of substituting traditional industrialization approaches with new ways of industrialization which are rural centered. Makinde & Makinde (2019) on their part suggested that to enable the location of industries in rural areas, there is the need to develop an integrated agriculture industry for small industries with vigorous partaking of state governments and financial institutions with constant efforts and measures to strengthen the local industries and improving the worth and marketability of their products with consumer inclinations instead of depending on rebates and subsidies through the area development tactic that has been protracted all over the country.

### CONCLUSION

After all the indications that rural industrialization a prerequisite for rural and national growth, it is sad to note that the degree and pace of change in rural settings is not at the expected pedal, necessitating the need for new approaches to deal with challenges such as influx of foreign goods in rural industries brought about as a result of globalization, urbanization, the de-agrarian of rural space, the increasing diversity of rural environments, and the special problems of low potential areas, others to include, growing diversity of livelihood strategies; rural poverty in low potential areas and the imperative need for

stronger social protection. Improvement of jobs and incomes will improve many other facets of rural life. There is the need for some additional policies on rural industrialization necessary for rural development.

It is also worth to note that industrialization is not enough instrumental policy for rural development but the need for variation of strategies instead of using the “one all strategy fit all” approach. A locality with aged and retired population for instance which is purely agricultural dependent and lacks proper resource base will be better served by policies other than industrialization. Each rural community is different from another in respect of its characteristics of population and resource base.

### RECOMMENDATIONS

The following recommendations are suggested for consideration by stakeholders:

1. A comprehensive and effective legal structure should be put in place to defend the rights and interests of rural dwellers.
2. Governments should consider ways and means of implementing preferential policies purposely designed for rural communities
3. Tax holiday schemes should be instituted to rural enterprises in proportion to arouse the interest in local economic development.
4. The promotion of technological development in rural areas should be a paramount concern to policy makers
5. More study needs to be conducted in different countries to better understand the process of rural industrialization so as develop a global approach to solving the problem of rural industrialization

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