Integration of Rural and Urban Society in China and Implications for Urbanization, Infrastructure, Land and Labor in the New Era

Haiying Feng¹ and Victor R. Squires¹*

¹BeiBu Gulf University, Qinzhou, Guangxi, China.

Authors’ contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/SAJSSE/2018/v2i329634

Editor(s):

(1) Dr. Angel Paniagua Mazorra, Department of Economics and Politics, Scientific Researcher of OPIS, Instituto de Políticas y Bienes Públicos, Spain.
(2) Dr. John M. Polimeni, Associate Professor, Department of Economics, Albany College of Pharmacy and Health Sciences, Albany, USA.
(3) Dr. Turgut Tursoy, Associate Professor, Department of Banking & Finance, Faculty of Economics & Administrative Sciences, Near East University, Turkey.

Reviewers:

(1) Sergey A. Surkov, International Institute of Management LINK Zukovsky, Russia.
(2) Abraham K. Kisang, Kenyatta University, Kenya.
(3) K. Shobha, Government Arts College Coimbatore, India.

Complete Peer review History: http://www.sdiarticle3.com/review-history/45575

ABSTRACT

In many parts of China, rapid economic growth, socio-economic inequality, and environmental degradation (air, water, soil) are undermining social stability and sustainable urbanization. Rural-urban migration is the main factor contributing to urban population growth. Economic opportunity in urban areas is the main ‘pull factor’ but government policies provide a ‘push factor’. A model of the relationship over time of the rural sector and the urban sectors, mainly relating to the focus on manufacturing and the services sector, is discussed. Each sector provides a market for the other. We use three cameos of different types of urban-rural development taking examples from a Prefecture-level city of about 500,000 population located in Guangxi Autonomous Region in southeast China. We analyze the infrastructure plan and land use planning in respect to the impact on labor, investment and urban growth.
1. CONTEXT AND SETTING

China is a big country undergoing unprecedented economic development. The words ‘New Era’ in the title of this paper reflect the thinking of President Xi Jinping at the 19th Communist Party Congress in Beijing in October, 2017 when he laid out his vision in the document ‘Thought on Socialism with Chinese Characteristics for a New Era’. The New Era represents a change in direction in China’s development away from a focus solely on GDP (Gross Domestic Product) growth towards Green development and creation of an ‘ecological civilization’. This is not to say that GDP will be disregarded but rather that it will be framed within the overall benefit of the country and its peoples.

China’s economic transformation since 1978 has been remarkable, including incredibly rapid growth of China’s cities. Over the last several decades, employment opportunities generated by industrialization and the expansion of the urban construction and service sectors, along with the gradual relaxation of controls on population movements have stimulated rural-urban migration on a massive scale. It is well understood that the flow of cheap labor out of agriculture to non-agricultural sectors improves economic efficiency and provides an important source of economic growth. Less understood are the significant impacts of rural-to-urban migration on rural development. Mass migration has impacts on rural development in a number of ways, including the loss of labor, changes in household age and gender structure and off-farm income [1].

2. RURAL-URBAN MIGRATION

Mobility of rural people in China’s countryside was first enhanced by the newly implemented household responsibility system [HRS], which in 1982 dismantled the communes and gave rural households individual contracts to farm agricultural land. A more efficient and productive use of resources – including labor – allowed for greater agricultural output and income, as markets for rural products thrived. The household became the main unit of production, at the same time that it acquired greater freedom of labor allocation as well as in migration decisions. Both household size and structure (the household development cycle) as well as land cultivation needs became important determinants of household surplus labor. In order to diversify the household income, surplus labor began to engage in off farm work. However, the pull factor (Fig. 3) created by enterprise labor demand led many peasant workers to leave the countryside even when they were not surplus to agricultural production. Mobility has further been ensured by a set of policies diminishing central state control over provincial and lower administrative units, which can now establish their own economic priorities. The new provincial and local economic strategies – especially in middle and larger urban areas – include bringing in cheap labor to work in construction, manufacturing and other service sectors. On the other side of the spectrum, decentralization policies in the rural areas have encouraged local governments to actively promote and facilitate out-migration in order to increase village living standards through migrant’s remittances. Increasing proportions of rural households and village income are indeed being derived from both migration and other non-agricultural activities.

Mass migration has impacts on rural development in a number of ways, including the loss of labor, changes in household age and gender structure and off-farm income [1,2].

The key questions relate to migration's impact on:

- income mobility,
- poverty alleviation,
- education,
- health and nutrition of migrant children, and
- the assimilation of migrant workers into the urban environment.

A new policy of rural urban migration was announced in 2012 chengzhenghunhua (城镇化, literally ‘city- and town-ization’. The Chinese government’s plans to move some 250 million rural residents into new towns and cities by 2050 (and 80 million by 2020). Unprecedented is the word commonly used to describe China’s urbanization. Yet the country remains less urbanized than most developed countries. What makes China’s urbanization process remarkable and, indeed, unprecedented is its magnitude and speed. Today, 51% of the Chinese population live in cities as compared to the 19% that did so in
1979. Under the 13th 5-year Plan emphasis was placed on urbanization of China. Targets were set to have 80 million people to become urbanized by 2020 and 200 million by 2040 to a point in 2030 when more than two-thirds of China’s population will be urbanized (Fig. 2). Over 100 million who are residents of cities will get their residential permits for urban living in 2018. China will limit land use in cities with over 5 million residents to prevent city expansion from eroding the area of farmland.

So, what distinguishes chengzhenhua from the former process of rapid urbanization in China?

- Will the trajectory of ‘becoming urban’ remain the same, such that the chengzhenhua policy ends up being nothing more than novel rhetoric?
- What goals are China’s fifth-generation leadership attempting to establish?,
- what new practices do they seek to adopt?, and
- which aspects of the status quo does chengzhenhua intend to break away from?

3. THE GOALS OF URBAN-RURAL INTEGRATION

The larger goal and rationale underpinning chengzhenhua is urban-rural integration 城乡一体化. The official discourse describes this goal as ‘breaking the urban-rural duality structure’ 打破城乡二元结构. In 2007, the Ministry of Construction established four ways of rebuilding peri-urban villages so as to integrate them into existing cities. The so-called Four Transfers involve: converting collective land ownership to state ownership; converting the rural household registrations of villagers into urban registrations; re-assigning social services provided by village collectives to selected municipal bureaus; and redeveloping villages according to the urban spatial planning regime.

On the one hand, many rural household registrations have been converted into urban ones. Therefore rural residents (cunmin 村民) have been officially renamed as city residents (shimin 市民) and villages (cun 村) as communities (shequ 社区). On the other, local infrastructure and services – in particular, health care, education and social security – remain largely funded through village collectives' assets and business earnings. Moreover, collective landownership has historically been the most important source of income for villagers, and any ‘across-the-board’ attempt for rural-to-urban land conversion almost always attracts local opposition. These gaps between the state’s attempts at urbanization and what has happened on the ground suggest that the new policy of chengzhenhua will encounter significant complications, contingent on the actual process of implementation in different places.

The zhen (‘town’) in chengzhenhua The new policy is focused on towns (zhen 鎮). Administratively, towns fall under the rural government system in China and are therefore subjected to rural institutions such as collective land, rural household registration and village governance. However, towns can be populous and prosperous. There are over 20,000 million towns in China, and the average population of the largest 1,000 of these is over 70-90,000 A major objective of chengzhenhua is to encourage and accelerate urbanization in large towns.

Promoting chengzhenhua in Towns It has become increasingly clear that there is no clear-cut (yidaqie 刀切) prescription for implementing chengzhenhua, because each town has its own historical and socio-political conditions. Nevertheless, three main approaches to organizing the various practices for ‘urbanizing’ towns can be identified.

New Zone Development 新区开发 is a major strategy used by local governments to implement chengzhenhua. Generating land-related profits through expropriation and conversion of rural collective land is central to this mode of development. The first of these is described in the official literature as encouraging farmers to move into the city (nongmin jin cheng 农民进城). Here, the word ‘farmers’ 农民 refers to people who hold rural household registrations with no bearing on their actual employment; ‘city’ 城 refers to the built-up residential areas in towns. The core idea of this approach is to reduce the threshold for people to obtain urban household registrations, especially for those who have already lived, worked, or been educated in towns and cities. An important reason behind this approach is that the rural immigrant population 外来人口 of many towns often outnumber the registered population 户籍人口 by
a large margin. Chinese urban planners and policy makers approach chengzhenhua by considering towns and villages as potential sites of transformation.³

The second approach to chengzhenhua is decentralising the authority for spatial planning. This approach is also commonly referred to as ‘planning first’ 规划先行. Sitting at the lowest level of the administrative hierarchy, town governments have little decision-making power over spatial development. Towns are usually rather passive recipients of the spatial planning conducted by higher levels of government. However, to promote chengzhenhua, towns selected as experimental sites have themselves been granted more power and authority over spatial planning and land leasing decisions. This means that town governments will be much more actively involved in spatial and land-use planning activities and have greater regulatory discretion in determining both the direction and content of town development.

The third approach is the legal relaxation of collective land transfers 集体土地流转. Currently, collective land is subject to many legal constraints on private and profit-oriented development. To permit and encourage chengzhenhua, experiments are currently in progress to both deregulate and marketize collectively owned land. This practice of chengzhenhua may significantly increase the degree of commodification of collectively owned rural land in China. In public discourse, this important change to the socialist divide between urban and rural land is lucidly described as ‘capital going to the countryside’ 资本下乡.

4. ECONOMIC GROWTH AND INFRASTRUCTURE DEVELOPMENT

Economic growth is fueled by enormous investments in infrastructure development – railways, especially highspeed rail ⁴, ports, transport hubs and networks, shipbuilding, manufacturing etc. Labor to undertake construction mainly comes from employment of rural workers. In earlier decades (it still continues) most labor was classified as migrant workers who spent some time on a major project and then returned to their home village. Some acquired skills and stayed on to be part of the maintenance team. In the past there were barriers to migrant workers settling down in the larger cities. The lack of an urban registration (Hukou⁵) denies migrants the ‘civic inclusion’ that comes with the access to institutions that provide capacities and resources. For example, children of those migrant workers who had a Hukou from another province or region were denied access to schools, health services etc. in the city where their parents were migrant labor. It took decades for the injustices in the system to be fully realized. Excluded from urban citizenship, migrants have developed their own resources to cope with the lack of public services. They have mainly relied on kinship and native place connections for mutual assistance and community formation at destination areas. Two of the most important outcomes of this congregation have been chain migration and the establishment of migrant enclaves. The more advanced of these entities have developed into self-sufficient communities separate from the state; offering cheap housing, job opportunities, schooling, and health care. These can be ‘city villages’ - an enclave within the city (see Fig. 4). The activities of this group of urban dwellers fall outside any official jurisdiction, and are thus a possible source of social disunity. However, these complex communities are still a minority; most peasant migrants are not always able to organize such sophisticated organizations.

5. INTERACTION BETWEEN RURAL AND URBAN SECTORS

Just how the government has dealt with the relationship between the rural sectors and the urban sectors since New China, depended on China’s stage of development. The government has been guiding migration as a formal rural development strategy since the early 21st century with a view to boosting agricultural intensification

³ Hukou is a certificate that establishes the citizen’s residential address. The Hukou system was introduced by the Mao Zedong Administration as part of ‘New China socialism building’ strategy in the late 1950s and formed step by step by more policies issued later. Its purpose was to prevent the flood of unskilled, poorly educated people deserting the countryside threatening social order while ensuring that improvement in agricultural productivity was not hampered by lack of labor.

⁴ It is planned to have completed over 30,000 km by the end of 2020. news.xinhuanet.com/english/2016-01/18/c_c135021027.htm
and promoting rural development. Nowadays the government is trying to revitalize the rural regions to cope with unbalanced rural-urban development and to reduce rural-urban income inequalities. There is widening gap between rural and urban dwellers [3,4,5] and this is even more noticeable when we compare disposable income [6] (see Fig. 1).

![Graph showing income gap between rural and urban households](image)

**Fig. 1.** The gap between incomes of rural and urban households is accelerating (compiled by the authors from multiple sources).

While China has all but eradicated extreme poverty, the poverty line has declined as a percentage of average disposable urban income, from 26.7% in 1998 to 13.8% by 2010. This means, in effect, that to be considered poor, one has to be quite far away from middle class living standards.

![Graph showing China urban/rural population growth](image)

**China Urban/Rural Population Growth 1950-2030**

**Fig. 2.** From fewer than 12% of the population living in urban centers in 1950 to a target of more than 60% urbanization in 2030. Note the upswing from the early 21st century.
There are many ‘pull’ factors that attract people to urban areas (Fig. 3) as well as ‘push’ factors arising from government policy.

This mass migration will not result in everyone moving to an already overcrowded ‘first tier’ city like Beijing-Tianjin, Shanghai, Guangzhou or Shenzhen. Instead third and fourth tier cities and many prefectural-level hubs or even large county cities will absorb many migrants. All migrants will need jobs and housing, some will buy property, others will want to rent and still others will live in sub-standard dwellings in what have become known as ‘city villages’ (Fig. 4). Some of the migrant workers find a job in the urban area and buy residential property but they also possess land in the villages so they are called double-residential persons. For them social integration is becoming a big problem. Many would-be migrants can find a job in the urban areas but cannot reside there or educate their children there and must migrate seasonally. Finally, most have to come back to the rural society. It is hard for them to apply new-found skills and be entrepreneurial without targeted policies for rural revitalization.
These can occur in the periphery of the CBD (downtown) to the outer edge. Prefectures and County governments across the country are acquiring land, building housing, schools, hospitals and developing infrastructure (better roads, integrated transport terminals) and manufacturing bases. Under the new era emphasis is on ‘ecological civilization’ so urban greening and beautification of the landscape is a major consideration in urban development and planning to ensure adequate green space.

The need for land to support industrialization and urbanization has resulted in forced displacement of farmers and conversion of agricultural areas into land allocated for industrial projects and urban real estate (housing) developments on the periphery of every city (Fig 5). There is a changing relationship over time of the rural sector and the urban.

Each sector provides a market for the other. Growth in both requires investment, but of distinctly different kinds. Their integration results in an S-shaped curve. The current need is for appropriate investments and policies to develop the productivity of the urban sectors so that they can continue to stimulate-and support modernized agriculture and still provide jobs for those who are leaving agriculture. The relationship between industry and agriculture in China is in transition depending on the geographic region and its phase of development. Many coastal areas are experiencing rapid change while inland areas and western China generally are proceeding at a slower pace. The new strategy of rural development and urbanization in China emphasizes town development. From the perspective of rural-urban integration, the big driver is the need to lessen the disparity between the industrialized urban centers and the rural hinterland.

6. MANY QUESTIONS -- FEWER ANSWERS

A key question is what happens when agricultural labor is no longer needed as a result of sudden structural economic shifts? How does the transition from unskilled labor to trained technician or skilled tradesperson occur? What roles do the Vocational Training Colleges have in preparing for the surge of young people seeking a trade (plumbing, electrician, brick layer, electronics technician, hairdressers, sales person, nurses’ aides, and health care providers, etc.

Whilst many of these questions and challenges have been faced in what are now developed countries the pace at which the transition occurred was so much slower there. China today is rushing ahead. It now in the post-Industrial era and is now a major proponent of high tech electronically-based systems of communication, banking, and manufacture, with much of the last-mentioned, by use of robotics. China, is at the forefront of technology to commercialize...
driverless vehicles, electric cars, Smart manufacturing and so on.

7. MULTILEVEL METROPOLITAN GOVERNANCE

Leadership is concerned about the megalopolises. The Development and Reform Commission and government Think Tanks like the Academies of Social Sciences, private research institutes, and other academic bodies express concerns about China’s megalopolises. The immediate causes of such high-level concern are threefold. First, socioeconomic and fiscal disparities between metropolitan centres and their outlying settlement clusters have reached a critical juncture and current domestic demographic trends portend an ever-worsening gap in terms of economic resources, including provision of water fresh food and the problem of waste disposal. To exacerbate the situation there is a serious air quality problem as burgeoning automobile numbers create many pollutants. Secondly, sharp competition within the global economy increasingly threatens the economic base of some core cities based on outdated manufacturing (steel making, cement making etc) and their inner-ring suburbs. New productive investments and industrial growth are predominantly in the outer suburbs and edge of cities. And thirdly, urban sprawl — uncontrolled land development and ‘leapfrogging’—is visibly threatening the sustainability of the physical environment of large urban communities.

Some argue that metropolitan governmental fragmentation is the primary cause of the newly emerging urban problems, and that some form of regional governance is the necessary first step towards a solution. Top-down directives, though out of favor, are necessary for managing metropolitan development and ensuring fiscal equalization. Furthermore, the hyper-complex nature of governance currently in place requires multilevel intervention, to reinforce local moves in the direction of regional co-operation and consolidation. Intergovernmental strategies are essential to promote metropolitan revenue-sharing, ‘smart growth’, the ‘new urbanism’ and the targeting of skills training, housing and transport opportunities to match the changing intraurban and interurban location of employment expansion and job needs. Central and local Revenue systems, revenue transfer at the central level, building supportive mechanisms at local level between regions where one body in a developed area provides money and talents to the body in the undeveloped region. That is in China, between the more developed eastern seaboard cities and undeveloped western hinterland where there is little or no revenue sharing between rural-urban communities.

Thanks to a booming national economy, most cities in China are experiencing a strong fiscal and economic growth [7]. Several factors need to be high on the agenda (i) Expanding Homeownership and Affordable Rental Housing. Homeowners can build strong neighborhoods but providing more assistance for rental housing is critical for alleviating the distress of worst case housing needs and homelessness; for overcoming the “housing/jobs mismatch” created by metropolitan development patterns; and for providing families with the support and stability they need to become part of the new labor markets. (ii) Promoting Smarter Growth and Liveable Communities. To realize the billions in savings that could be generated by strengthening existing developed communities, the strategy includes a major initiative to promote liveable communities. It also includes measures to ensure public safety, strengthen schools, and preserve natural resources and historic amenities. By providing communities with strong tools to tackle these challenges, the strategy helps enhance the attractiveness of both new and existing neighborhoods for residents, businesses, and investors.

The pattern throughout China today is for investment and job creation in the exurbs and rural-greenfield locations purposely targeted by large scale domestic and international corporations e.g. automobile and aircraft assembly plants, electronics manufacture, biomedical industry, chemical material manufacturing, smart industry, logistic centres and cloud data centres. We need a new theoretical basis for our understanding of urban and regional economics and a better appreciation of urban-rural sociology in a rapidly-changing China. The governments should make supportive policies and reform the system in both rural and urban areas to be based on more human-centred approaches with regard to land use rights, Hukou reform and labor mobility, and the right of farmers to choose which crops to plant so as to maximize revenue from their agri-food systems.

---

6 Land beyond the suburbs, often requiring land acquisitions totalling hundreds of hectares
8. QINZHOU PREFECTURE – A MICRO COSM THAT EPITOMIZES CHINA IN THE NEW ERA

In the cameos that follow we hope to illustrate the type of regional development that has taken place or is planned in the near future. We choose as our study site, Qinzhou Prefecture in the Guangxi Zhuang Autonomous region in south China (Fig. 6).

The Prefecture’s population of over 4 million is made up mostly of the Han nationality and area spanning 10, 843 km² that includes several counties. The Prefectural city of Qinzhou lying on the Gulf of Tonkin (also called Beibu) has an urban population of over 600,000. The local government has some forward-looking plans to transform this strategically-placed coastal region and its port city into a modern metropolis and economic powerhouse over the coming decade. The development strategy is favoring comprehensive industries but also sees a bright future for eco-tourism, sightseeing, recreational and resort facilities etc. Plans are well advanced to bring this about along the beaches, foreshore and in hinterland (Fig. 7).

Cameo 1 Rail/port integration Geographically, Qinzhou is located at the core of North (Beibu) Gulf also known as the Gulf of Tonkin, where there is a very important port to become a link in the rejuvenated 21st Century marine silk road as proposed by China as part of the ‘Belt and Road Initiative’ (see Cameo 3). Qinzhou is a starting point, and a connection/or transportation hub facing eastern Asian countries that lie around the South China Sea. Qinzhou is the terminus of high speed, freight-only, rail system linking Lanzhou, a city of 4 million people on the banks of the Yellow river in Gansu Province to Qinzhou, a lesser-known coastal city on the Gulf of Tonkin. The high-speed rail line is over 1650 km long and can deliver freight both ways in about 7 hours – this will cut the time from 27 hours, using the old lines, and makes possible delivery of fresh produce like sea food and consumer goods for regional sales or for on-forwarding through the upgraded rail links to Central Asia and Europe as part of the ‘Belt and Road Initiative. It also allows rail delivery of vital strategic supplies, including military equipment. The recently opened rail link is designed to make Qinzhou city a regional transport hub. Qinzhou is also the terminus of a high speed (200 km/hour) passenger train service to Guangzhou, capital of China’s richest province with its own links to Hong Kong and Macao.

The port facilities in Qinzhou will be further upgraded to handle bigger and faster container ships as well as support the recently-revived fishing industry based on high tech marine aquaculture (see Cameo 3). The Qinzhou Free Trade Zone was officially established and approved by the State Council in May 2008 as a state-level free trade port area and is part of the Qinzhou port that covers 10km² has an annual throughput capacity of over 100 million tons. Shipbuilding will also be feature of the port facility and is expected to employ thousands in the construction phase and in the ship building itself, although the skill set required (welders, riveters, machinists, marine architects, maritime diesel technicians etc) for the latter is likely to be provided by specialists from other parts of China.

9. CAMEO 2 SMART MANUFACTURING AND INFRASTRUCTURE

A major green fields development plan will see the construction of a large (27,000 m²) facility (Fig. 10).

This facility occupies 7.5ha and is on former woodland/farmland, including cropland. Displacement of 7 households occurred. Compensation included provision of apartments in Qinzhou metropolitan area of in similar apartments in the county town and offers of off-farm employment. The facility, once completed, will be an example of Smart manufacturing. Smart manufacturing (SM) is a technology-driven approach that utilizes Internet-connected machinery to monitor the production process. The goal of SM is to identify opportunities for automating operations and use data analysis to improve manufacturing performance. Smart Manufacturing is about big data and predictive analytics calculations and artificial intelligence. It puts machines in the business of real decision-making—outside the range of human capabilities. The emergence of cheap connected devices, coupled with the availability and affordability of mass computing power, has been the biggest driver of Smart Manufacturing. The location of

---

7 In China the administrative hierarchy is Province, Prefecture, County, Township and Village, A Prefectural city might have 5-8 Counties within its boundaries and a population exceeding 10 million.
8 english.gov.cn/beltAndRoad
Fig. 6. South China is undergoing massive development under the impetus of the 21st Century Maritime Silk Road initiative as part of China’s Belt and Road Initiative

Fig. 7. Coastal zoning has been done, land use planning for foreshore and hinterland are coordinated.

various industrial facilities in Qinzhou Prefecture is determined according to the North Gulf Development Master plan, as a part of Belt and Road Initiative⁹ and has been integrated into the intra-regional transportation grid that is under construction.

10. CAMEO 3 REJUVENATED MARITIME AQUACULTURE INDUSTRY AND ASSOCIATED INTEGRATED PACKING, AND SHIPPING FACILITIES

Artisanal fishing and marine aquaculture on a small scale (mainly shell fish and shrimp) have been a feature of the coastline around the Gulf for millennia. Recent advances in the raising of marine animals (fin fish, shell fish, crustaceans and even specialty creatures like squid, octopus, sea cucumber etc) have made it possible to support coastal populations with high yielding aquaculture facilities that return a good level of income. Plans are being developed in conjunction with local government (both Prefectural and Regional¹⁰) and commercial firms to utilize the waters of the Gulf and the adjacent hinterland to establish a ‘state of the art’ marine aquaculture industry. Artisanal fishing will continue but it is envisaged that many local people will get employment in the new ventures.

⁹ english.gov.cn/BeltandRoad

¹⁰ Guangxi is an Autonomous region for Zhuang ethnic minority
Initially, in the construction of the facilities in the sea, at the port and in the hinterland where processing, packing and shipping will occur.

Development of modern marine aquaculture is ongoing as evidenced by a grid of black spots, line after line, straight as the rays of the rising sun, from one shoreline to the other. The spots are buoys that support the submerged platforms and thick netting that grow scallops, clams, oysters, and mussels. The buoys, tended by fishermen in wooden boats that have become gray and weathered by decades of use, are the most visible features of an aquatic food factory that has potential to employ hundreds and feed many.

Production practices have been adopted to ensure that Qinzhou’s marine aquaculture industry becomes a model of local food production that is ecologically sustainable and safe. The waters of the North Cape bays where shellfish are produced are clean. Shellfish gain their food from the tides; they are not fed. And fishermen don’t use antibiotics or any other drugs to raise them.

---

**Fig. 8.** Upgraded port facilities and container terminal are well underway

**Fig. 9.** China has established several Free Port Trade Zones, including some Dry Port Zones in the hinterland.
Fig. 10. Greenfield sites are popular because they face fewer constraints and provide opportunities for entrepreneurs to design a facility to suit their present purposes and also leave room for future expansion.

Fig. 11. Artisanal fishing and small-scale culture of shellfish and crabs is giving way to large-scale marine aquaculture.

Marine aquaculture is but one part of broader investment initiative that has seen Qinzhou port raised to the status of Free Trade Port Area (see Cameo 2).

11. CONCLUSIONS AND SUMMING UP

There are many major infrastructure projects going on in China, of which these three cameos are an example. They employ hundreds of
thousands of rural workers. The unskilled labor force in Qinzhou city alone is over 15,000. The government of China has chosen an opportune time to facilitate migration to the urban areas as the types of developments described briefly above are been replicated and scaled up across China – many as a direct result of the economic impetus created by the Belt and Road Initiative. There are challenges with infrastructure expansion such as rail, maritime facilities, manufacturing, processing and packing facilities, and actor coordination. Cheap land and labor may not be enough if there is a dearth of top talent.

A reasonable debate, informed by an understanding of changing rural–urban settlement patterns, is required as a basis for local and regional planning. There are research questions to be answered (see above) and a greater degree of coordination across the different levels of government must be achieved before everything will be better. We need a new theoretical basis for our understanding of urban and regional economics that focuses on land and labor, factors that are major part of urbanization and rural revitalization in the new era (2). The sociological aspects relating to the rural-urban interface are often neglected (8) in the rush to move and to build and develop. We hope that the observations we make here may help to foster more research and investigation into this important aspect of China’s planned shift to an urbanized society.

ACKNOWLEDGEMENT

The work reported here is part of the ongoing research conducted by the Institute for Qinzhou Development in conjunction with local government and private entrepreneurs who are engaged in public-private partnerships and in advancing Green Development.

The first draft was written by VRS but extensively modified by HF in response to referee and Editor’s comments. The authors contributed equally to the paper.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES