

ROLE OF SUB – REGIONAL GROWTH CENTER TO ECOTOURISM GROWTH POLES OF NORTHERN MAINLAND, PALAWAN, PHILIPPINES

Raphael P. Gonzales¹ and Edgar M. Reyes Jr.

*Department of Community and Environmental Resource Planning
College of Human Ecology, University of the Philippines Los Baños, Laguna, Philippines*

Email: ralpygonzales@gmail.com

ABSTRACT

Majority of the ecotourism industry in Palawan are located in northern mainland part of the province. El Nido and Puerto Princesa city act as ecotourism growth poles by ranking as the most visited tourist areas in Palawan. The municipalities between the growth poles are considered as sub – regional growth centers (Roxas, Dumaran and Taytay) since they serve as transition areas from one growth pole to another. The study intends to explore the basic role of the sub – regional growth center to the existing growth poles in terms of ecotourism industry. Through secondary data gathering and key informant interviews, the following results were obtained: a) agriculture (e.g. crop production, livestock, poultry, fisheries etc.) is the main economic driving force of the sub–regional growth center; b) the agriculture sector in the sub–regional growth center supports the development of the ecotourism growth poles; and c) following the growth pole theory, there are existing “spread” and “backwash” effects from the growth poles to the sub–regional growth centers. Moreover, the study suggested general strategic regional directions to complement and assure a sustainable growth of the sub–regional growth center along with the growth poles in terms of ecotourism development.

Keywords: complementary development; “spread” and “backwash” effect; sustainable

1. INTRODUCTION

Palawan is one of the provinces in the Philippines that have ecotourism and agriculture as factors that serve as the driver of economy. Based on the data of Palawan Tourism Promotions and Development Office (PTPDO), there is a total of 870, 478 tourist visitors in 2013 higher by 67.48% (587, 441) than that in 2008. Majority of the ecotourism industry in Palawan are located in northern mainland part of the province in which the municipality of El Nido and Puerto Princesa city are located. In the 2013 ranking, Puerto Princesa and El Nido got the top and the third (3rd) spot in the most visited site in Palawan (Salcedo 2015). These municipalities offer different tourism–related activities such as accommodation, leisure, food, tours, and sightseeing among others.

On the other hand, the agriculture sector of Palawan has the highest share in MIMAROPA. It covers 225.9 hectares or 15.2% of the total land dedicated for agricultural crop production (PSA 2013). Major crops which the province produces are rice, corn, coconut, mango and banana. While carabao, cattle, chicken, duck, and goat account for the livestock industry.

The municipality of El Nido and Puerto Princesa City are the primary ecotourism industry in northern mainland Palawan, these two areas act as primary growth centers. The

phenomenon situates the growth pole theory formulated by Francois Perroux in the early 1950's which emphasizes on the economic growth of a region by having key industries that has interconnections with different industrial activities and affects the area by promoting economic development (e.g. increase in employment, high labor force, expansion of existing industries, etc.) (Wheeler et. al. 1998).

However, this phenomenon connotes polarization, showing the differences in economic activities on the growth pole and the periphery. These differences form the regional disparities and the center of the region is very persistent in the developing world (Balisacan 2006). This development perspective, however, has been adapted in the Philippines as early as mid-70's (Mercado 2002).

Integration of a municipality's economic development path plays a crucial role in the regional development. This study will contribute in the identification of the development strategy for the periphery municipalities (sub-regional growth centers) of Palawan by providing recommendations that will serve as alternatives towards regional ecotourism development. Also, this study aims to promote an even regional development by proposing unique and complementary ecotourism strategies that could give a better economic health in the whole northern Palawan.

Analyzing the role of the sub-regional growth center (Roxas, Dumarán and Taytay) on the context of ecotourism growth poles (El Nido and Puerto Princesa city) of northern mainland, Palawan will be critical to form the regional ecotourism context. The study focused mainly on El Nido and Puerto Princesa city as the ecotourism growth poles due to their existence as the ecotourism centers of Palawan while municipalities of Roxas, Dumarán and Taytay as the sub-regional growth center being the transition municipalities from Puerto Princesa to El Nido. Also, this study centered only on the agricultural and ecotourism aspect of northern mainland, Palawan being the primary driver of their economy.

2. METHODOLOGY

The study covered four municipalities and a city at such regional scope, the utilization of available data provides a practical opportunity for a researcher having inadequate time and resources (Johnston 2014). Secondary data collection is significant in extension work by reducing the workload of the researcher as it simplifies the generation of information needed for the research (Brodeaur et. al. n.d.). Such information was gathered from the different offices (e.g. MAO, MPDO, MENRO, Mayor's Office, et. al.) of each municipality and city involved. Also, data were sourced from various database systems at the provincial and national level that possess diverse information significant to the study. Gathered secondary data were validated through Key Informant Interview.

To clarify the role and assignment of the sub-regional growth center, the study identified the competitive advantage and assets of the sub-region in relation to the growth poles through the industry key success factors. This emphasized the importance of competitive factors such as natural environment, infrastructure, services, etc. which affect the survival of the industry in the market (Thompson et. al. 2012). By doing so, the ability of the sub-region to produce a unique industry that has the potential to emerge towards regional development was highlighted. In addition, determination of strengths and weaknesses as assets of the sub-region uncovers different potentials that contribute to the determination of competitive advantage (Blackwell & Eppler 2014).

3. HIGHLIGHTS OF THE RESULTS

3.1 Analysis of the Existing role of the Municipalities of Dumarán, Roxas and Taytay

Sub-regional growth center or the peripheral municipalities in a growth pole shares distinct character and performs definitive role, especially for the growth poles. Although it is well established that El Nido and Puerto Princesa City are the ecotourism growth poles in the northern mainland Palawan area, understanding the role of periphery/sub-regional growth center is critical to address regional development.

It is important to investigate why tourism, which brings undoubted benefits to many third world countries, also frequently perpetuates class and regional inequalities, economic problems and social tension (Britton 1982). Manifestations of regional disparity occur when there is an uneven economic growth between regions due to certain advantages and disadvantages (e.g. natural resources, economic activities, cost of services, etc.). Roxas, Dumarán and Taytay are the transition municipalities in between the growth poles/ecotourism continuum (Puerto Princesa and El Nido). These municipalities are characterized by merely having residential background with low economic production and income. On the basis of the growth pole strategy, as interpreted by John Parr (1999), the municipalities of Dumarán, Roxas and Taytay categorically fall as periphery areas of the ecotourism growth poles of Puerto Princesa and El Nido not only because these municipalities are geographically located in between the two ecotourism giants (**Figure 1**) but also because of the following characteristics:

Population Character. Having an annual population growth rate of 4.51% and 3.32%, Puerto Princesa City and El Nido respectively are clearly the growth centers of northern mainland Palawan wherein majority of the economic activity especially tourism and other industries are situated (Table 1). Unlike Roxas (2.59%) and Dumarán (2.67%), Taytay has a higher growth rate (3.10%) because it has more established economic characteristics as it was once the provincial capital of Palawan. However, due to the onset of ecotourism boom and changes in political setting, even the once capital town was over shadowed by El Nido in terms of population growth. Population growth acts as an indicator of changing population character brought about by changing economic pace of an area. Clearly, El Nido and Puerto Princesa lead in population growth in the last two decades (1990s), the decade when ecotourism in Palawan started rolling.

Table 1: Historical Growth of Population of the Growth Poles and the Sub-Regional Growth Center (1990 – 2010)

Municipality	Population					AAGR (%)
	1990	1995	2000	2007	2010	
Roxas	36,604	44,370	47,242	51,084	61,058	2.59
Dumarán	12,624	13,980	16,616	18,737	21,397	2.67
Taytay	38,435	47,095	53,657	61,991	70,837	3.10
El Nido	18,832	21,948	27,029	30,249	36,191	3.32
Puerto Princesa	92,147	129,577	161,912	210,508	222,673	4.51

Source: Philippines Statistics Authority, 2015

Population Density. Population distribution of the municipalities under the sub-regional growth center shows that there are few places having dense population that affects the level of productivity (Parr 2008). Taytay has a total population density of 55 persons/km² with the largest land area (1,265.24 km²) and population (70,837). Roxas followed with a population density of 49 persons/km² in a 1,225.50 km². Comparatively, there is only slight difference between the characteristics of Roxas and Taytay. Lastly, Dumaran has the lowest total population density of 38 persons/km², lower compared to Roxas and Taytay.

Majority of the dense areas in the sub-region, such as Sta. Teresita and Poblacion in Dumaran, are classified as urban areas which have the factors that make a certain barangay dense. These factors are proximity to resource, food, livelihood, and establishment among others. Another factor is the history of a certain region, an example of which is Taytay, that happens to be the former capital of Palawan (Figure 2). However, these urban barangays do not have the pace of urbanization that the municipality of El Nido and Puerto Princesa City have.

Socio-economic Character. Puerto Princesa City and El Nido having higher annual population growth rates than that of the sub-region (Dumaran-Roxas-Taytay) have the agglomeration of economies. Observed manifestations are the accumulation and concentration population together with capital resources, present in the growth poles (Gantsho 2008). This leads to the availability of social services geared towards the center to accommodate larger population groups and the influx of tourists as well. Also, being the center of tourism (Puerto Princesa city and El Nido), economic investment increases which further attracts increase in the density of the population (Sygez 2013). For instance, records of unemployment for Roxas and Taytay in 2010 are 56.97% and 73.28%, respectively which are very high.

Spatial Stratification. Based on the Provincial Development and Physical Framework Plan (2014-2023), municipalities under the sub-region (Dumaran-Roxas-Taytay) are classified as an agriculture-based economy which act as producers of major crops, livestock, poultry and fisheries. On the other hand, given the potential for agriculture-based economy, majority of the growth poles (El Nido and Puerto Princesa city) are areas for tourism and urban growth. This is an example of spatial discrimination in which there is a selective process on the potential role of a certain region in providing such economic activity (Parr 1999). This also transcends to the fourth aspect of growth pole in which due to unavoidable alterations of functions, there is a distinct effect on the sub-regional growth center that may emerge as new role.

Market Orientation. Agricultural production of Dumaran, Roxas and Taytay primarily go to tourism centers of the province. Roxas' and Dumaran's cashew production directly go to Puerto Princesa to provide for the booming cashew souvenir goods. Dumaran's livestock and Taytay's fish production, respectively, go primarily to Puerto Princesa City to meet the increasing hotel and restaurant demands. This is also true with some High Value Commercial Crops (HVCCs) and other vegetables produced only for the tourism industry.

With these characteristics, it is clear that the sub-regions act as support for the agricultural economies of the ecotourism industry of Puerto Princesa and El Nido. Also, implicitly, these municipalities, by virtue of the growth pole strategy, are inevitable recipients of the "spill over" economic benefits (and possible negative effects) and services found in the growth centers since the growth centers have the services and investments for further development.

3.2 Implications of the Ecotourism Growth Poles

The inevitable phenomenon of growth pole eventually leads to several implications affecting both the growth pole and more significantly the sub-regional growth centers (Dumaran, Roxas and Taytay). Termed as forward and backward linkages (Perroux 1950) or spread and backwash effects on growth center theory (Myrdal & Hirschmann 1957 and 1958), these implications are also evident in the area of study.

Vibrant employment generation in the growth poles. Manpower coming from the sub-region (Dumaran, Roxas and Taytay) is directly employed in Puerto Princesa City. Manual labor and efforts at the municipality level is not reaped by the municipality but by the growth poles where the demand is present. In the case of Dumaran, all the vocational school graduates supported by the national government landed a job in either Puerto Princesa City or El Nido (MSWD 2015). Struggling business and industry formation is felt due to lack of effective manpower, financial resources and investments which are taken primarily to areas more profitable (Puerto Princesa city and El Nido). This unfavourable socio-economic context may also explain the shape that entrepreneurship can place in an area (Chouinard, Desjardins & Forgues 2002).

Population Composition. Ecotourism pulls much of the local population to the growth poles for employment purposes. Locals from Dumaran, Roxas and Taytay also choose to reside near their place of work. Other aspects of this sub-regional population out-migration account for the services that only Puerto Princesa City provides.

Agricultural Productivity. Crop and livestock production is geared towards the increasing demands of Puerto Princesa City and El Nido even with equally increasing products demand at source (Dumaran-Roxas-Taytay). Attraction is evident since this growth poles (PPC and El Nido) offer a larger market. Also, some areas in the sub-region, especially in the case of Dumaran, act as exclusive supplier of livestock and vegetables for Puerto Princesa in lieu of its booming ecotourism industry (MAO 2015) despite the fact that there is a demand for similar products in the same municipality. Agriculture also forms the majority of the economies of Dumaran, Roxas and Taytay with 70%, 70%, and 72.36% respectively (SEP 2010). This implies the strong dependence of the sub-region in agriculture. In addition, these agricultural produce of the sub-region accounts for the raw material goods devoid of value addition, which the capital city of Puerto Princesa profits.

Poverty Threshold. Poverty incidence can be characterized by high household size, low weight of children under five, lack of asset ownership, residential characteristics, dependence on informal sector and casual employment and unemployment (Gant 2006). Since ecotourism has caught the attention of industries in the northern mainland Palawan, the incidence of poverty is evident in the sub-regional growth center. These are further catalyzed by privatization and deregulation of public areas such as islands, forestland, and agricultural lands among others, resulting to instability of jobs in the locals (Gant 2006). Majority (68.07%) of the households in the sub-regional growth center are classified to be *below poverty threshold* with a total magnitude of 29, 918 (ERMP 2015). Taytay has the highest number of households that belong to this classification with 13, 264 (76.54%), followed by Roxas with 12,993 (66.49%), and Dumaran with 3661 (43.02%). On the other hand, households which are classified to have poverty below food threshold are also evident in Roxas, Dumaran and Taytay with 52.69%, 27.40%, and 60.87% respectively. This phenomenon can be attributed to the combined characteristics of the sub-region which further proves that there is an existing disparity in terms of the economic development between the growth poles and the sub-region.

Critical Ecosystem Disruption. In the case of the sub-regional growth center, there is a conflicting scenario between the relationship of environmental conservation and economic development. Resources from marine ecosystem such as fish products are decreasing, coral reef specifically in Dumarán are already not in good shape due to unsustainable practice, privately owned pearl farms limits the use of coastal waters, the conversion of mangrove and forest lands to residential areas, and unsustainable practice of *kaingin system* (slash and burn) is evident in Taytay and Dumarán. These mentioned activities were centred mostly on production of goods that benefit the growth centers because the product flow gear towards them.

3.3 Defining the new roles for the sub-region: A multiple Ecotourism poles strategy for regional development

Puerto Princesa City and El Nido in northern mainland Palawan definitely lead in the industry of ecotourism. Equally important to note are the municipalities forming the sub-regional growth center that support and keep the ecotourism activities of Puerto Princesa City and El Nido through manpower and agricultural support. However, a growing tertiary type of industry that harvests much of the income for the province, like tourism, will outcast the agriculture even if the manpower and input level are more concentrated in this sector.

The creation of multiple ecotourism growth poles will definitely provide the promotion of rural development as explained in the growth pole strategy (Parr 1999). The multiple ecotourism growth poles will keep up with the increasing needs of the existing ecotourism growth poles (Puerto Princesa city and El Nido) in terms of agricultural production while simultaneously creating complementary ecotourism centers for the municipalities of Dumarán, Roxas and Taytay. The multiple ecotourism growth poles for the sub-region will be mimicking the "One town, One product" approach. The One Town, One Product (OTOP-Philippines) is a priority program of the government to promote entrepreneurship and create jobs (DTI 2011). However, this strategy will be more radical in its approach to make the primacy of ecotourism service in the municipality exemplary and well-coordinated for the sub-regional ecotourism to work. One such setting involved a case where regional development was based on the expansion of recreational or tourist activity (Harper et. al. 1966).

The fact that the sub-region has a competitive advantage between the growth poles, an opportunity cost is associated with it. The competitive advantages of the sub-region will be further utilized through division of labor and specialization. Table 2 indicates the advantages of the sub-region in relation to growth poles. Since the municipalities under the sub-region focuses on agriculture, majority of their competitive advantages also relate to the given sector. However, differences such as endemic species, historical site, and local products are also considered as competitive advantage.

In essence, the emergence of multiple ecotourism growth poles may lead to a sustained strong economic growth (Lin 2010) since the sub-region (Roxas, Dumarán and Taytay) have a competitive advantage from the growth poles (El Nido and Puerto Princesa). Further prioritization and strengthening of potential could further reduce the gap between the developments of the two regions.

Forest and mariculture economic activities will help the municipality of Dumarán highlight its competitive advantage as a municipality endowed with rich and diverse forest and marine ecosystem.

Roxas, as a largely agricultural economy, must focus on its flourishing agro-industry, promoting agri-ecotourism as its competitive advantage. Value addition on agricultural products and diversification of products from their local produce can be a strategic development measure.

Table 2: Competitive Advantage of the Subregion in relation to the Growth Pole

Sub - regional Municipalities	Competitive Advantage	Ecotourism Potential
Dumaran	Philippine Cockatoo (Katala), WW-II Ruins (Shipwrecks)	Forest and mariculture
Roxas	Cashew, Bat Island	Agro-ecotourism
Taytay	Spanish Fort, Malampaya Sound, Irrawaddy Dolphin	Agro-marine ecotourism

Source: Municipal Profile of the municipalities, 2015

Taytay on the other hand, must continue to provide the fishery resources requirement of the province and also develop itself into a fishing village industry. Also, its heritage potential is undoubtedly probable tourism offering.

These ecotourism industry formations will only be possible if the analysis of the current state of their ecosystems is done in complementation with proper guidelines for doing the activities as community-based. Also, to integrate this regional ecotourism for Dumaran, Roxas and Taytay, a specific regional level working group must be formed to coordinate the complementation of these activities in relation also to the existing ecotourism industry of the whole northern Palawan region.

4. CONCLUSION

The municipalities of Dumaran, Roxas, and Taytay significantly show the characteristics of the peripheral areas as manifestations of the existence of ecotourism growth poles in the northern mainland Palawan. Acting as a sub-region, all these three municipalities highlight the implications of being transition and peripheral municipalities supporting the continuous growth of the ecotourism centers. Such implications include the positive economic gains for Puerto Princesa City and El Nido through vibrant ecotourism industries. More significantly however, is the implication on the inevitable negative impacts of the established relationship to the sub-regional center (Dumaran-Roxas-Taytay) which experiences economic losses in employment, population and investments. While continuously providing agricultural and other primary products supply to Puerto Princesa city and El Nido, the sub-region (Dumaran-Roxas-Taytay) suffers from critical ecosystem function losses due to demand driven conversion and use of natural resources to augment the increasing demand for ecotourism services.

Regional ecotourism as a strategy is proposed to limit the increasing negative impacts of polarization of ecotourism in Puerto Princesa and El Nido. Such strategy emanates from the context of growth pole as well, but to create multiple ecotourism growth poles including the unique offers of Dumaran, Roxas and Taytay that perfectly complements the already existing ecotourism industry.

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REFERENCES

Agyemang, KK 2001, Structural adjustment programmes and the international tourism trade in Ghana, 1983-99: Some Socio Spatial Implications, *Tourism Geographies*.

Alampay, RB 2005, *Sustainable Tourism: Challenges for the Philippines*.

Balisacan, A et. al. 2006, *Regional Development Dynamics and Decentralization in the Philippines: Ten Lessons from a "Fast Starter"*. University of the Philippines Diliman and South East Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA). Los Banos.

Bernt, M & Colini 2013, *Exclusion, Marginalization and Peripheralization: Conceptual Concerns in the study of Urban Inequalities*. Leibniz Institute for Regional Development and Structural Planning.

Blackwell, R & Eppler, D 2014, *An Approach to Strategic Situation Analysis: Using Models as Analytical Tools*. Troy University, *The Journal of Global Business Management*. Vol.10, No.1 pp. 80-86.

Britton, S 1982, *The Political Economy of Tourism in the Third World*. Department of Geography, University of Auckland, New Zealand. *Annals of Tourism Research*, Vol. 9, pp. 331-358.

Brodeur, CW et. al. (n.d.), *Using Secondary Data to Build Strong Extension Programs*.

Cohen, E 1988, *Authenticity and Commodization in Tourism*. *Annals of Tourism Research*. Hebrew University of Jerusalem, Israel. Vol. 15, pp. 371-386.

Gantsho, M 2008, *Cities as Growth Poles: Implication for Rural Development*. Maputo, Mozambique. Retrieved from; <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Knowledge/30732219-EN-DR-MANDLA-S.V-GANTSHO-CITIES-AS-GROWTH-POLES.PDF>.

Grant, U 2006, *Urban Economic Growth and Poverty*. Poverty Report 2008-2009. Chronic Poverty Research Centre. University of Wisconsin-Madison.

Harper, RA, Schumde, TH & Thomas, FH 1966, *Recreation based economic development and the growth-point concept*, *Land Economics*, 42, pp. 95±101.

Horst, T (n.d.), *Tourism and Economic Development in Mountain Regions an Economic Assessment*. Faculty of Economics, University Hamburg, Germany.

Hospers, GJ 2003, Localization in the Europe's Periphery: Tourism Development in Sardinia. European Planning Studies.

Johnston, MP 2014, Secondary Data Analysis: A Method of Which the Time has Come. Qualitative and Quantitative Methods in Libraries. School of Library and Information Studies, University of Alabama, Tuscaloosa, AL, USA. pp. 619-626.

Lin, YJ 2010, A Global Economy with Multiple Growth Poles. World Bank. pp 77-118

Mercado, R 2002, Regional Development in the Philippines: A Review of Experience, State of the Art and Agenda for Research and Action. Philippine Institute for Development Studies. NEDA.

Chouinard, O, Desjardins, PM & Forgues, E 2002, "Collective Entrepreneurship and Regional Development: Case Study of a New Brunswick Cooperative". JOURNAL OF RURAL COOPERATION, 30(2) 2002:79-94.

Parr, J 1999, Growth-pole Strategies in Regional Economic Planning: A Retrospective View. Part 1 Origins and Advocacy. Urban Studies, Vol. 36, No. 7, 1195-1215.

Salcedo, AM 2015, A Model of Tourism Destination Choice: Palawan Province Case. School of Economis. University of Asia and the Pacific. Philippines.

Sambrook, RA et. al. (n.d.), Tourism Growth Poles Revisited: A Strategy for Regional Economic Development in the Dominican Republic.

Sharpley, R 2010, Tourism and Sustainable Development: Exploring the Theoretical Divide. Journal of Sustainable Tourism.

Syez, EW 2013, Growth Pole Theory As A Concept Based On Innovation Activity Development And Knowledge Diffusion. Uniwersytet Gdański, Wydział Zarządzania/University of Gdańsk, Faculty of Management.

Thompson, AA, Peteraf, MA, Gamble, JE & Strickland, AJ 2012, Crafting and executing strategy: The quest for competitive advantage. New York: McGraw-Hill/Irwin.

Wheeler, J et. al. 1998, Economic Geography. Library of Congress Cataloging-in-Publication Data. John Wiley and Sons, Inc. 3rd Ed.