



Potential Leading Resources in Padang Panjang City, West Sumatra: The Development of Regional Economic Based on Soft System Methodology (SSM)

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Authors' contributions

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

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ABSTRACT

In order to improve competitiveness and enhance economic development, each region in Indonesia must be able to make the best use of its potential natural and cultural resources. The City of Padang Panjang is one of 514 district in Indonesia with great potentials for tourism industry. However, these potentials have not been strategically developed to enhance the region's economic development and competitiveness.

The aim of this research is to design the best strategy of tourism industries development based on available potentials resources using Soft System Methodology (SSM). Analysis showed that the *thawalib* education system, *plate dance* and *Minangese Cultural Centre* may serve as three of the most promising potentials for developing cultural tourism in Padang Panjang City. In order to create a sustainable tourism industry, public involvement and cooperation with neighboring regions, is

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required. Furthermore, any strategies for the development of tourism industry in Padang Panjang City must be integrated with other sectors of development.

Keywords: Plate dance; potential resources; thawalib; SSM; sustainable tourism.

1. INTRODUCTION

The Government of Indonesia through Presidential Regulation No. 8 of 2008 has adopted a policy on national economic development by promoting the development of regional industry based on leading commodities already existing in respective regions by the concept of "One Regency One Core Competence" (OROC) [1]. *This concept is similar to the concept of "One Village One Product" (OVOP) developed in Japan by Hiramatsu, the Governor of Oita, in 1979, and "One Tabon One Product" (OTOP) developed in Thailand in 2001* [2].

The concept of OROC has encouraged each regional government to choose one of the best sectors of industry available in their respective regions as the sole basis of their economic development. In fact for managing the leading resources each region has developed an excellent regional core competence [3]. Core competence is the aggregation of integrated skills and technologies accumulated through learning process taking place in a (business-oriented) organization which results in a high level of competence and competitiveness [4]. Core competence is crucial regional capabilities to develop regional economic and competitiveness [2,4].

Two of the leading resources available in most regions in Indonesia are natural beauties and cultural diversity, which can serve as the basis for the development of tourism industry. The development of tourism industry at regional level will accelerate the growth of regional economy, promote the equal distribution of development, and increase the rate of employment [5].

In addition to adopting and applying the concept of OROC, the Government of Indonesia has also been active in promoting the growth of regional industry through the development "reliable areas." These areas to stimulate regional economic development and to bridge the economic gaps among various regions in Indonesia [3]. However, in order to successfully implement this strategy, each region must be able to determine its leading industrial sector by

taking account of available human resources and infrastructure [6].

Geographically, the City of Padang Panjang is located strategically on Trans-Sumatra highway which is itself an excellent potential for the development of tourism industry [7,8]. This region can also serve as a connector for its surrounding tourism areas, such as Kota Gadang, Japanese Caves in Bukittinggi, Lake Singkarak, and Lake Maninjau [9]. However, the main problem to day is how to exploit potential resources as a driving force for the development of regional economy and competitiveness. This study aims to serve as basis for developing regional tourism industry based on leading local resources by applying Soft System Methodology (SSM) which combining both deductive and inductive processes.

2. LITERATUR REVIEW

From the perspective of regional economy, core competence is the ability of a region to build infrastructure, both physical and non-physical, in order to attract both national and foreign investors [10]. Various terms have been used by many scholars refer to core competence, such as resources, strengths, skills, capabilities, organizational knowledge, distinctive competence, and intangible assets [11]. Resources and capabilities will contribute to high level of competitiveness if they have these three characteristics: (1) valuable, (2) rare, and (3) hard to imitate [12]. Regional competitiveness is an ability to increase its bargaining position in an effort to achieve the best possible outcome [13,14]. While [1,15] stated that regional development strategy includes spatial and sectoral approaches. Sectoral approach focusing on economic productivity, and the spatial approach is associated with the use of space for the benefit of the economy.

There are three parameters to identify a core competence, which are (1) its ability to provide potential access to various markets; (2) its ability to make a meaningful contribution for customers; and (3) its ability to prevent imitation by competitors [4] or pool of experience [11]. Competitiveness can also be developed by 4

criteria: (1) rare capabilities, which are the abilities not possessed by competitors at present or in the future; (2) imperfect imitable capabilities, which are the abilities to produce goods or provide services which cannot be easily imitated by competitors; and (3) non-substitutable capabilities which cannot be easily replaced by other capabilities; and (4) valuable capabilities, which enable the organization to take the best advantage of opportunities and/or to minimize external environmental threats resulting from its operations [10]. Generally capabilities have five characteristics as shown in Figure 1 [16].

Based on expert opinion [4,10,11] generally core competence has two main characteristics: Unique that cannot be imitated and replaced with other and have a benefit for users.

Local communities involvement have a big role in developing sustainable tourism [17,18] one of the most important roles of local communities on involvement stages of tourism development is the provision of culinary and accessories, and development of cultural attraction [19]. Minangese social culture is one of the most tourist attraction in Padang Panjang City [7].

The system approach is considered as the most suitable method, because of the complexity of the problems. Where the system's approach is based on the three principles of complexity, dynamism, and stochasticity and on the SHE philosophy which stands for cybernetic, holistic, and effective [20-22]. The characteristics and philosophical principles of the System approach are represented by the following Figure 2.

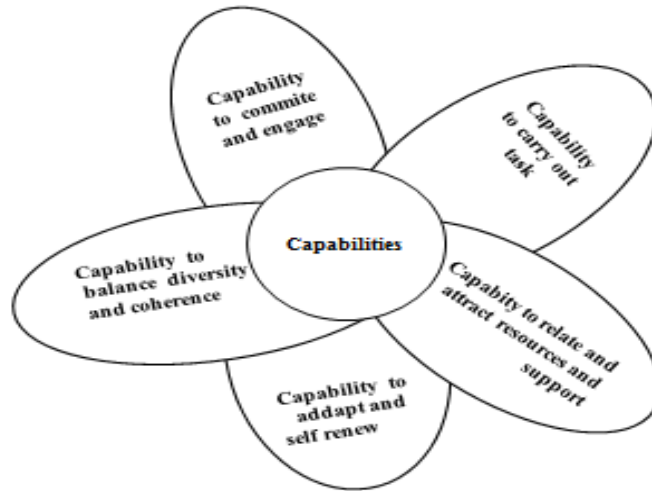


Figure 1. Five core capabilities [16]

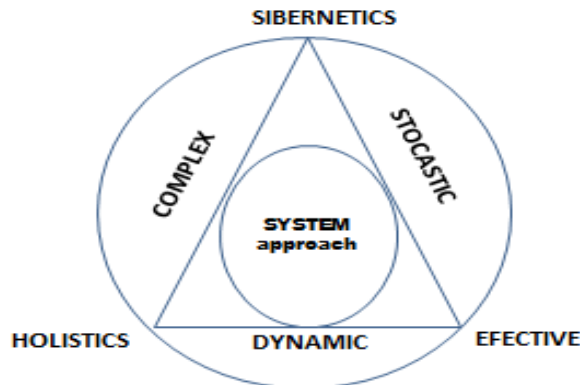


Figure 2. Characteristics and philosophy of the system approach [22]

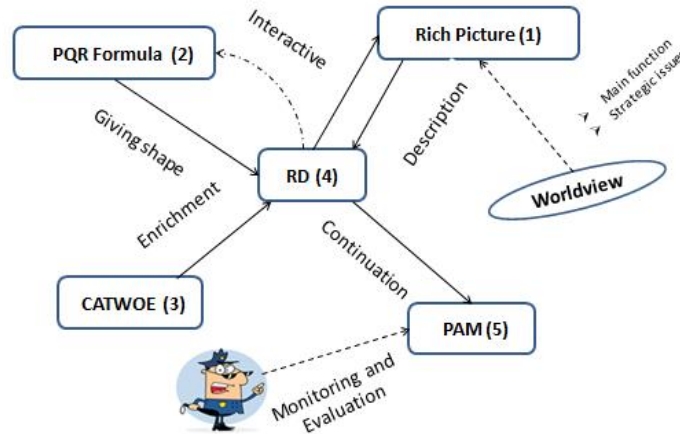


Figure 3. Conceptual map of PAM development [22]

3. METHODOLOGY

This study applies two processes: inductive and deductive. The inductive process begins with an analysis of current system which describes the interconnectedness of input, process, and output factors through a black box diagram. The process then continues with an analysis using Soft System Methodology or SSM [23] which consists of (1) CATWOE (Customer, Actors, Transformation, Weltanschauung, Owners, and Environment) analysis; (2) Rich Picture (RP) to describe the interconnectedness of main aspects in ethnographical terms [24]; and (3) Root Definition (RD) to formulate the strategies for the sustainable development of tourism industry. The inductive process ends with the generation of graphs as the representation of implementation plans or activities using the PAM (Purposeful Activity Model) method. PAM is generated from three basic questions—what, how, and why—and by applying the concept of PQR (P: do; Q: with; R: in an effort [22], as shown in Figure 3 above.

The deductive process applies the AHP (Analytical Hierarchy Process) method [25,26]. This analysis is carried out to determine the priority of strategies for developing tourism industry by taking account of available resources and real condition on tourist spots. The AHP analysis is carried out in the form of a discussion involving five experts: A representative from the government, a scholar, a businessperson, a community leader, and a representative from a non-governmental organization. Both of inductive and deductive process the convergence analysis by LTP (logical thinking process) approach [27]

will be adopted to generate the right strategy in accordance with objective condition.

4. RESULTS AND DISCUSSION

The result of inductive analysis showed that the City of Padang Panjang has a great potential as a tourist destination in the Province of West Sumatra. One of the most promising cultural tourism resources in Padang Panjang City is the *thawalib* education system which was founded in 1930's, it is the oldest education in Indonesia, which integrate both common and Islamic system. This education model has been adopted in several areas in order to create excellent human resources with a good personality. In addition, Padang Panjang City also houses a center for the development of Minangese culture.

In order to create a strong network with the general tourism industry throughout the Province of West Sumatra it is required to build strong cooperation with the managements of nearby tourism area such as the Japanese Cave, the 'Gadang Clock Tower' of Bukit Tinggi, Lake Singkarak, and Lake Maninjau. Based on the results of the experts' discussion, a Rich Picture (RP) of tourism industry development in Padang Panjang is presented in Figure 4. While The Root Definition (RD) represented as follows.

Sustainable tourism industry (W) which able to enhance the development of regional economy (T) and to provide employment for the local people (C), and this can be achieved by the support of businesspeople, education institutions, and training courses (A), as well as the regional government (O) and by developing suitable business climate (E).

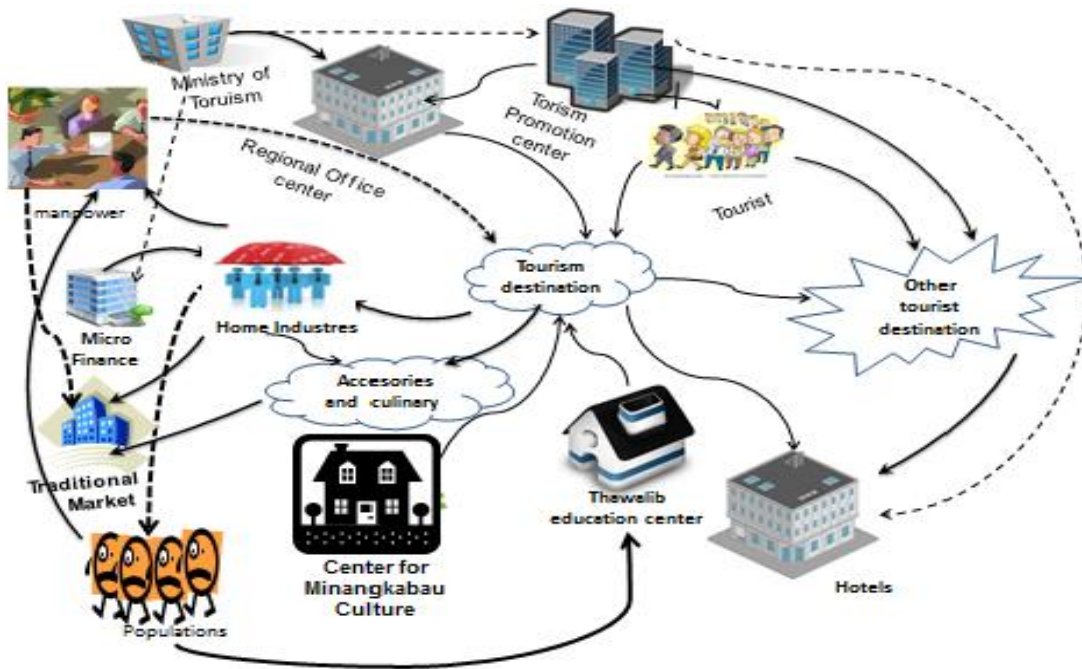


Figure 4. Rich Picture (RP) of the tourist destination in the city of Padang Panjang.

Based on The above RP and RD then Purposeful Activity Model (PAM) was created, as represented in F5 follow.

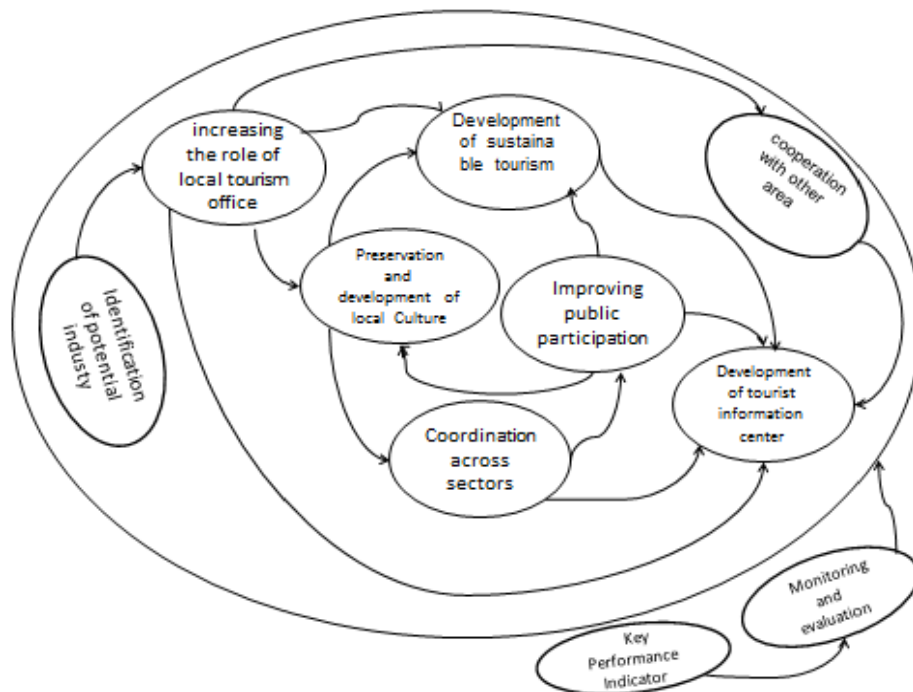


Figure 5. Purposeful Activity Model (PAM) of the development of tourism industry in the city of Padang Panjang

The main attraction of Padang Panjang City is cultural tourism especially “*Tari Piring*” (Plate dance) and “*makan bajamba*” (eating together in open space). There are 3 important activities are interrelated (Preservation and development of “local culture”, Coordination across sectors and improving public participation) and one major activity (development of tourist information center) which determining tourism industry development in Padang Panjang City (Figure 5).

prominent actor responsible for the development of regional tourism industry is the Local Tourism Agency (0.295), followed by businesspeople and the tourists themselves, each of whom stands at 0.195. While economic values is the main factors to development tourism industry (0.190), followed by the employment of local people (0.180). Then the most appropriate activities to develop tourism industry is promotion (0.400) and on the other hand analysis shows that the development of cultural, culinary and education center is the best strategy for developing the regional economy and competitiveness based on turism industry (0.339). Structure of AHP analysis shown in Figure 6.

On deductive process we determine strategic priorities using AHP method based on experts jugment. The results showed that the most

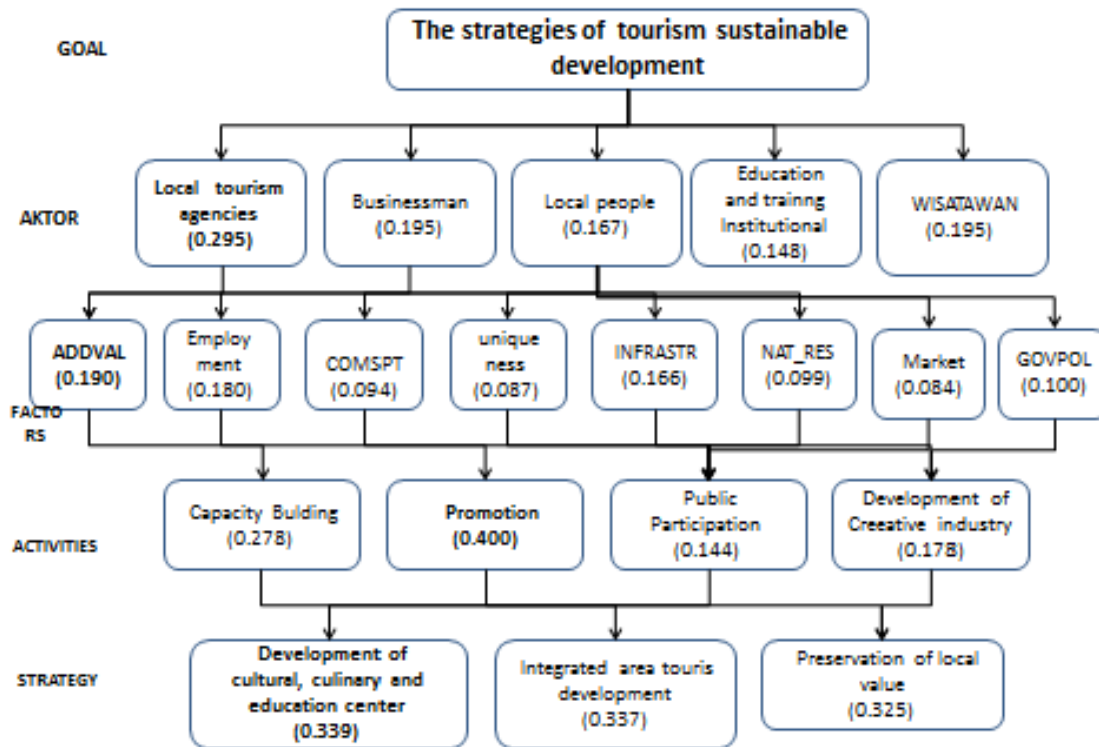


Figure 6. The hierarchical structure of sustainable tourism development in Padang Panjang city

Descripton :

- ADDVAL : Economic Added value
- INFRASTR : Infrastructure
- COMSPT : Community support
- NAT-RES : Natural resources
- GOVPOL : Government Policy

Convergence analysis result of inductive and deductive process shown the meeting point of the right strategy to develop the tourist destination that matches with objective condition, as shown in Figure 7.

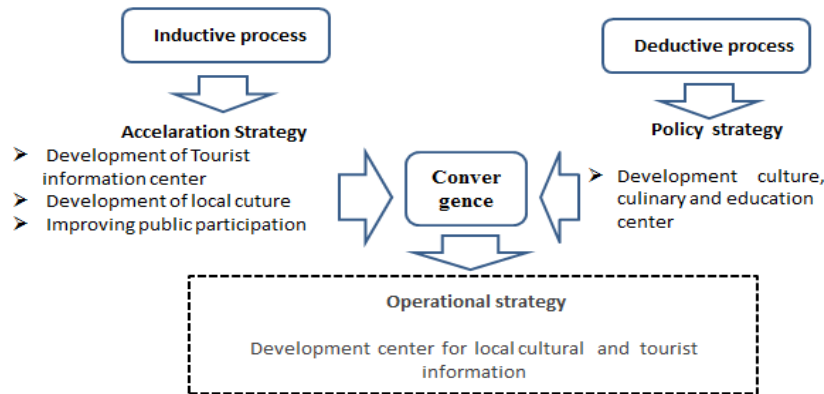


Figure 7. Convergence of the inductive and deductive processes

Figure 7 show us that building a center for local culture and tourist information is the most appropriate strategy needed to develop tourism industries in Padang Panjang in accordance real condition.

5. CONCLUSION

The tourism industry offers a bright prospect for the City of Padang Panjang to enhance its regional economy and competitiveness. The *thawalib* education and local cultural traditions of tarian Piring & Makan Berjamba are the most tourism attraction. The best strategy for developing tourism industry, based on the real condition is to develop a center for cultural and culinary tourism which emphasizes on regional uniqueness as its main attraction. The highest priority must be put on promotional activities highlighting cultural and culinary distinctiveness in order to attract potential tourists.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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