

**BUILDING THE ENTEPRENEURAL SPIRIT OF LOCAL COMMUNITY TO MANAGE LAKE LIMBOTO AS SUSTAINABLE PUBLIC ASSET****Trisusanti Lamangida, Apris Ara Tilome, Joice Machmud**Corresponding author: [tri.susanti@um-gorontalo.ac.id](mailto:tri.susanti@um-gorontalo.ac.id)**Abstract**

Lake Limboto is a vital public asset that concerns the lives of many people hence it is important for the government to pay serious attention and proper management on it. Furthermore, three parties are closely linked to the sustainability of this public asset. Building the entrepreneurial spirit of the local community to manage Lake Limboto should be addressed to be the inspiration and new spirit of the entrepreneurial community as a sustainable investment. This study aims to analyze and explain the importance of building the community entrepreneurial spirit on the management of Lake Limboto as a sustainable investment, particularly in the economic empowerment of local community. Data were collected using FGD technique, literature studies, and field observation. The analysis was conducted using qualitative descriptive approach. This study revealed the development of community business groups or creative-innovative behavior of consumers in managing Lake Limboto. In the implementation, innovation becomes more valuable in building creativity and innovation, particularly in building the entrepreneurial spirit in managing Lake Limboto as a public and regional asset in the present and the future. The theoretical implication is to reaffirm Schumpeter's theory of innovation. In association with the economic empowerment and development of community, entrepreneurship is aspired to realize human resources who are reliable, professional, highly motivated with the need of achievement, risk takers, innovative and independence. It entails the abilities to create new products and services in the market, new place of business transaction, new buyers, new market leader, and to support economic development.

**Keywords:** development, entrepreneurship, public, investment.

**Introduction**

Lake Limboto plays an important role for the communities in Gorontalo Province in general and the local community in particular. As a public asset that serves its benefits to fulfill the rights of people, it totally requires the government's commitment and proper management. As stipulated in article 33 of the 1945 Constitution, "The land, the waters and the natural resources within shall be under the powers of the State and shall be used to the greatest benefits of the people (MPRRI, 1945). The three pillars of development are: 1) government, 2) private sector, 3) society ( Lamangida et al., 2017). In the context of Lake Limboto, the efforts required to foster the entrepreneurial spirit of community involve meaningful approaches in

empowerment programs. It is in line with the public entrepreneurship perspective of the Lake Limboto management (Syam et al., 2018) , which is an inspiration and new enthusiasm for the local community of the coastal Lake Limboto to carry out a sustainable regional investment. This lake is undergoing an on-going changes of land use, including community settlement resulted from land deterioration, as well as environmental harms and siltation since it is heavily infested with water hyacinth (*Eichhornia carssipes*) and sedimentation process due to erosion as the result of downstream flooding (Suma et al., 2019). Despite the conservation efforts have been made through community empowerment and academic involvement (Nusantari, 2010), yet the mindset of

the local community around Lake Limboto has not been altered.

As a consequence of the on-going damage in Lake Limboto, some parts of lake side turn into swamp serving as agricultural land—the swamp dries up over time and is processed into agricultural land by the local community. Moreover, as some of them need a place to live, they divide the agricultural land (paddy fields, moors, and plantations) into settlement thus the changes in land use comprise lake—agricultural land—settlement (Umar et al., 2018). Both siltation and inappropriate land use by the local community have caused issues related to sustainable lake management as stated in Regulation of Local Government No. 8 of 2008. Moreover, Lake Limboto has been designated as a provincial strategic site (Sipil et al., 2006).

The management of Lake Limboto is intended to protect and conserve a public asset as a regional investment hence it can provide benefits for environment and human in the future. Furthermore, three fundamental problems are identified and addressed by the first-year program of Lake Limboto management, namely: 1) efforts to reduce the siltation of Lake Limboto in a continuous program through the harvest and utilization of water hyacinth as handicraft materials, 2) community economic empowerment through business management capacity development of water hyacinth handicrafts, and 3) human resource development of the local community as the target group. The methods include: 1) determination of the priority of issues that must be readdressed by distinguishing it into three-year activity program, 2) reconstruction and improvement based on the issues, evaluated each year, 3) improvement carried out based on the character approach of the local community. It divulges: 1) the use of water hyacinth as a handicrafts is able to reduce siltation, 2) the managerial skills of the local community have improved, and 3) the human resource development of the local community as target group is successful (Wolok et al., 2019).

Empowerment of local communities through entrepreneurship requires several strategies, such as building creative and productive SMEs that absorb human resources, e.g., banana chips production in the economic empowerment field (Mustanir, n.d.). Based on the field observation, it can be claimed that the increasingly deterioration of Lake Limboto is noticeable in which it is estimated that it will turn into land by 2025 (Umar

et al., 2018). In addition to the on-going siltation process, poverty and health become other issues. The local community in Lake Limboto is associated with poverty and the government has the duty and priority to provide the basic needs of the local community. Actually, the settlement is inhabitable since it is constructed above the lake, as well as the problems related to unemployment rate and heavy invasion of water hyacinth in the lake. Meanwhile, the Central Government is actively pursuing efforts to prevent damages caused by water hyacinth and sedimentation as well as other conservation activities through the Provincial Government and BWS Sulawesi II, BPDAS. The empowerment strategies implemented in the programs for local community of Lake Limboto have been carried out for the fishing communities in Lake Toba in Lumban Binanga Village, Laguboti Sub-district, Toba Samosir Regency (Wolok et al., 2019).

## Research Method

The present study aims to analyze and explain the significance of building the entrepreneurial spirit of the local community in Lake Limboto. It covers the community empowerment programs by using technology to process water hyacinth and sediment into valuable, commercial products, in which the programs are expected to be a sustainable investment. It is particularly addressed for the economic development of the local community in Gorontalo Regency. Data were collected through FGD, literature studies, and field observation. Data analysis was carried out using qualitative-descriptive approach.

## Results and Discussion

Building the entrepreneurial spirit of the local community in Lake Limboto through the efforts to develop community business groups or creative-innovative behavior of consumers in managing Lake Limboto (Syam et al., 2018), is an endeavor to develop the skills and competences of community and human resources in entrepreneurship. The basis for this endeavor is interpreted interchangeably due to unpredictable dynamics (i.e., international trade, supply and demand, competition as a finding mechanism, and opportunities). Such change provides new conceptual thinking about entrepreneurship. Several perspectives on entrepreneurship are put forward by experts such as:

1. Venkataraman (1997) defines entrepreneurship as the discovery, evaluation and use of goods and services for future needs.
2. This definition is general and often perceived to be less accurate for many parties, especially academic communities.
3. Shane and Venkataraman (2000) define entrepreneurship based on various theoretical perspectives and frameworks. Currently, this definition is claimed complicated since Shane and Venkataraman defined it without any theoretical basis.
4. Curran and Blackburn (2001) argue that the development of entrepreneurship has ambiguous paradigm due to various interests of stakeholders.
5. Landstrom et al. (2001) state only few studies discuss entrepreneurship.
6. Bygrave and Hofer (1991), Gartner (2001), Low and MacMilan (1998) suggest about the absence of equilibrium between the understanding of entrepreneurship and the basis of its paradigm.
7. Formaini (2006), explains that most of the entrepreneurship is perceived from....

In the concept of entrepreneurship, there is a term called "social entrepreneurship." Essentially, it is defined as the creativity and innovation aimed at: a) Resolving social problems; b) Developing the potential of community; c) Fulfilling community needs, and so forth, in a way that allows managers to also earn income to maintain the sustainability of activities (Mustanir, n.d.). Furthermore, there are many strategies for the local community empowerment in entrepreneurship, including:

1. The establishment of creative and productive SME sectors that potentially absorb human resources such as the production of banana chips (community empowerment in economy).
2. The establishment of productive agricultural land or a variety of farming equipment to increase the productivity of farmers in remote areas (community empowerment in agriculture).
3. The opportunity for local community to manage a livestock business in a mass and group in one particular business (e.g., chicken farms) and provide credit assistance to those who needs to develop their business

(community empowerment in the field of animal husbandry).

The importance of human resource development at community level has been stated by Sihombing et al. (2019) in a study on the competency of community in the entrepreneurship-based homestay management of Silimalombu Village, Samosir Regency, in which they are able to attract foreign tourists in visiting Samosir. It indicates that community empowerment programs in entrepreneurship assist the community in dealing with entrepreneurship, to have entrepreneurial spirit, be innovative and independent, which in turn contributes to the increase in local revenue (PAD). At the implementation level, innovation is valuable in building creativity and novelty, especially in nurturing the entrepreneurship spirit of the local community in managing Lake Limboto as a public and regional asset. The theoretical implication is to test Schumpeter's theory of innovation as explicated in his book the theory of economics, which was published in Germany in 1911. Fostering the entrepreneurial spirit of the local community in managing Lake Limboto is one of sustainable investments. As an implication, it will lead to the local community empowerment, to have the ability and courage to escape from the vicious circle of poverty line.

Entrepreneurship is a strategy in the efforts to address the basic problems of the national economy. In fact, economic growth is driven by the economic activities carried out by entrepreneurs (Mila, 2013; Karomah et al., 2013). Today, social entrepreneurship is disseminated rapidly, not only in the business sectors, but it also inspires a model of efficiency through a combination of traditional entrepreneurial sources and a mission to change the social conditions of society. The concept of entrepreneurship has invaded the global market competition (Trihudyatmanto, 2019)

Hence it is highly estimated that community empowerment-based entrepreneurship for the local community in Lake Limboto can be successful. In the training of trainer (TOT) of Entrepreneurship organized by Dikti (28 Nov 2012), entrepreneurship education is explained to be a method to foster an academic environment related to the character building of higher education students and graduates. Character building is through the efforts to inculcate the values of trustworthiness, leadership, and accountability and

ethos for work, which are targeted to generate new entrepreneurs as a solution to problems related to high unemployment rate. Entrepreneurship education covers many dimensions, ranging from the formation of mindset to the self-reliance (Mila, 2013). Therefore, it can be ascertained that fostering the entrepreneurial spirit of the local community of Lake Limboto is an attempt to assist social self-reliance, especially in facing the fourth industrial revolution. The rapid, continuous development of technology urges the community to be able to compete with the environmental situations.

In facing the dynamics of science and technology, movement and revitalization become key points, particularly in the context of the entrepreneurial spirit owned by the community to face the changes in the fourth industrial revolution. Hamdan (2018) argue that entrepreneurship has positive influence in the economic growth, giving opportunities for the community. The massive development of SMEs has an impact on the community economic development as implied in several studies, i.e., The empowerment of rural communities through transformation of entrepreneurial values in village programs (Bekun & Tiza, 2017), The survival strategy of fishing communities in Lake Toba (case study in Lumban Binanga village, Laguboti sub-district, Toba Samosir regency (Bekun & Tiza, 2017), The prospects of Nile tilapia-processed SMEs in Lake Toba area (Saragih et al., 2019), The empowerment of fishing communities, human resource development in coastal areas (Nugroho, 2015). Similarly, Megawati et al. (2019) reveal that community-based social entrepreneurship model is able to manage green open space with several principles, including: (1) developing social innovation to resolve environmental problems, (2) utilizing the character of a site to create new products and services, (3) utilizing networks to improve products and services, and (4) involving the community to gain support from the wider community. Meanwhile, the snapshot of the socio-economic condition of the fishing community based on social entrepreneurship has been exposed by Cahaya et al. (2019).

Social innovations aim to resolve environmental issues, including problems related to siltation, settlement, water hyacinth and sedimentation. Through innovation, there are potential breakthroughs that alter threats into

opportunities and innovation. As the main trigger for the siltation of Lake Limboto, water hyacinth and sediment are utilized to generate products with high economic value. As a positive implication, it creates job opportunities, requiring the provision of workers and services that has developed into local wisdom. Nevertheless, such changes demand the consideration of all levels of society, private sector and stakeholders in the region.

Nevertheless, ineffective management of Lake Limboto is influenced by several factors, including the emphasis on sectoral development, conflicts and ambiguity in ownership. In many cases, sectoral development approaches are less constructive to promoting the use of natural resources in an integrated way. Such approach merely focuses on the benefits of a sector and overlooks the consequences arising from or against other sectors. Consequently, it triggers conflict of interests among the stakeholders. The different goals, objectives and plans potentially lead to conflict over the use of natural resources. Such conflict exacerbates due to the absence of legal enforcement and legal uncertainty, leading to neither consistent regulation nor legally-binding sanctions (Hasim, 2012). Stakeholders carry out their duties sectorally or partially. Hence, conflict among the government, local community and the private sector exists in managing the multi-year budgeting of Lake Limboto.

The synergy as well as the synchronized and simplified coordination among the government, local community and private sector in the management of Lake Limboto has not been established. Social problems and the stricture of Lake Limboto, based on the perspective of public entrepreneurship, have not been addressed appropriately. Ineffective development of community-based entrepreneurship program in Lake Limboto management is caused by several factors, including: 1) lack of support from local government, especially in the coastal area of Lake Limboto, despite the amount of village fund budget (ADD) is actually can be optimized to build economic development and the welfare of the village community; 2) lack of facilities and sophisticated technology to support the community enhancing innovation and creativity; 3) lack of funds; 4) lack of assistance and supervision from competent parties in terms of conversation and revitalization. Jhingan (2012) suggests entrepreneurship for community economic

empowerment and development is expected to build character and realize human resources, in which it entails several characteristics as follows:

First, professionalism and need of achievement. The key to success in today's competitive global economy lies in human resources. Educated workforce with broad insights and knowledge will be able to adjust to the industrial sectors and have a suitable occupation. People work because of the urge to meet their needs, instead of being 'poor' and relying on the government's assistance. It is incorporated in Maslow's basic needs of humans (Kartikasari & Handayani, 2012), namely: physical needs, safety needs, social needs, the needs of esteems, and the needs for self actualization. Meanwhile, Mc. Cleland's theory of three needs explains the need for achievement, the need for affiliation and the need for power to support optimal performance (Studi Manajemen & Ekonomi, 2011).

Based on observation on the competence of human resource on the coast of Lake Limboto, specifically in Hutadaa Village, Telaga Biru District, it can be claimed that the local communities have no special competence and ability to lead themselves for a change. In addition, it is exacerbated by several factors, namely: 1) inherited poverty; 2) low self-confidence; 3) lack of support from the society and government; 4) Limited knowledge and technical assistance from other parties. The majority have non-permanent income as fishermen, farmers or motorcycle pedicab drivers. In general, they have the eagerness to improve their life yet the current infrastructure is insufficient. Consequently, the chance to change their condition is very small. In a study, Dunga et al. (2018) explicate that people have recognized water hyacinth as valuable material hence they participate in training and education on the use of water hyacinth and sediment, but fail to practice it on site.

Second, risk taker, innovative and independence. Educational background becomes another cause of low workforce absorption in which most of the unemployed graduate from primary and junior high school. As an implication, their efforts of being innovative and creative are far from expectation. Poverty is linked to dependency and lethargy hence people tend to rely mostly on the government. Endeavor and vision to devise alternative, new products and services are indecisive. Nevertheless, the chance to create

new place of business transactions is quite simple, affordable and fast. Marketing of water hyacinth and sediment-based products can be done via online. In addition to being economical and affordable, it is likely to exceed the target. Building entrepreneurial spirit will create new market leaders. Foreign (PMA), domestic (PMDN) and other investments affect economic growth in a positive direction. Nevertheless, the comparison between before and after decentralization clearly shows that investments have insignificant effect on economic growth. It implies the influence of investments on regional economic growth in which regions have not provided constructive situations for domestic and foreign investors (Sodik & Nuryadin, 2005). Human resources and local wisdom are social capital or investment that must be continuously maintained. Investment sustains capital stock adjustment processes of Lake Limboto according to the expectations. In addition to costs, the expected rate of return is often influenced by internal factors, i.e., Lake Limboto is heavily infested with water hyacinth, area capture, floating net, and land ownership by the local community. External factors also affect these processes, i.e., erosion/sediment that occurs as a result of large-scale forest exploitation in the upstream area (Bone Bolango) without considering the sustainability aspects, and the lack of public awareness on the restoration plan to realize Lake Limboto as sustainable regional investment.

### **Conclusion and Recommendation**

A study on building the entrepreneurial spirit of the local community in managing Lake Limboto as sustainable public asset indicates the significant participation and commitment of government, private sectors and local community, especially in terms of funding and assistance in community empowerment programs. Human resources and local wisdom are highlighted in building entrepreneurship spirit in which they are the real investments that build people with the need of achievement, risk taker, innovative and independence. They are expected to provide valuable contribution to the increase of local revenue (PAD), particularly in new products and services, new places of business transactions, new buyers, and new market leaders. The local government is recommended to prioritize entrepreneurship-based local community empowerment programs through village administrative, in order to motivate

and facilitate the local community in realizing economic development and the sustainability of Lake Limboto in the future.

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#### References

- Bekun, S., & Tiza, A. L. (2017). Pemberdayaan masyarakat pedesaan melalui transformasi nilai-nilai kewirausahaan dalam pelaksanaan program desa mandiri cinta petani (Sari Tani) di Kecamatan Insana, Kabupaten Timor Tengah Utara. *Agrimor*, 2(01), 4–9. <https://doi.org/10.32938/ag.v2i01.125>
- Cahaya, A., Akib, H., Said, F., Mustari, & Yahyaddin, M. (2019). Snapshot of the socio-economic life of fishermen community based on social entrepreneurship in Bone Regency, Indonesia. *Academy of Entrepreneurship Journal*, 25(1), 1–11.
- Dungga, W. A., Sulila, I., & Aneta, Y. (2018). *Kabupaten Gorontalo*. 24(2), 617–622.
- Hamdan, H. (2018). Industri 4.0: Pengaruh revolusi industri pada kewirausahaan demi kemandirian ekonomi. *Jurnal Nusantara Aplikasi Manajemen Bisnis*, 3(2), 1. <https://doi.org/10.29407/nusamba.v3i2.12142>
- Hasim. (2012). *Desain kebijakan pengelolaan terpadu dan berkelanjutan pada danau limboto provinsi gorontalo*. p.199.
- Karomah, U., Peneliti, Y., Penelitian, P., Lipi, E., Kunci, K., Jawab, T., Perusahaan, S., Sosial, K., & Komersial, K. (2013). Kewirausahaan sosial dan tanggung jawab sosial perusahaan: Tantangan sinergi multi-sektor dan multi-dimensi social entrepreneurship and corporate social responsibility: Synergy challenge for multi-sectors and multi-dimension. *Jurnal Ekonomi Dan Pembangunan*, 103–123.
- Kartikasari, D., & Handayani, F. (2012). Pemenuhan kebutuhan dasar manusia pada lansia demensia oleh keluarga. *Diponegoro Journal of Nursing*, 1(1), 175–182.
- Megawati, V., Pratono, A. H., Mulya, T. W., & Prima, D. A. (2019). Kewirausahaan berbasis komunitas : Model bisnis untuk pengelolaan aset dan infrastruktur. *Jurnal Manajemen Aset Infrastruktur & Fasilitas*, 3(2), 109–118. <https://doi.org/10.12962/j26151847.v3i2.5885>
- Mila, H. (2013). Pendidikan kewirausahaan: Sebuah alternatif mengurangi pengangguran terdidik dan pencegahan korupsi. *AL-Ta Lim*, 20(3), 465. <https://doi.org/10.15548/jt.v20i3.44>
- MPRRI. (1945). *Buku Undang Undang dasar negara Republik Indonesia Tahun 1945*. 1–166.
- Mustanir, A. (n.d.). *Pemberdayaan masyarakat kewirausahaan*. Retrieved from: [https://www.researchgate.net/publication/331311483\\_Pemberdayaan\\_Masyarakat\\_Kewirausahaan%0Ahttps://www.academia.edu/38428570/Pemberdayaan\\_Masyarakat\\_Kewirausahaan](https://www.researchgate.net/publication/331311483_Pemberdayaan_Masyarakat_Kewirausahaan%0Ahttps://www.academia.edu/38428570/Pemberdayaan_Masyarakat_Kewirausahaan)
- Nugroho, M. (2015). Pemberdayaan masyarakat nelayan di Kabupaten Pasuruan: Kajian pengembangan model pemberdayaan sumberdaya manusia di wilayah pesisir pantai. *TEKNOLOGI PANGAN : Media Informasi Dan Komunikasi Ilmiah Teknologi Pertanian*, 6(1), 19–26. Retrieved from: <https://jurnal.yudharta.ac.id/v2/index.php/Teknologi-Pangan/article/view/464>
- Nusantari, E. (2010). Kerusakan danau Limboto dan upaya konservasi melalui masyarakat dan peran perguruan tinggi. *Jurnal Pendidikan Biologi*, 1(2), 1–22.

- Saragih, R. S., Sinaga, K., Perkantoran, M. A., Indonesia, P. B., & Indonesia, P. B. (2019). *Prospek pengembangan kewirausahaan olahan ikan nila*. 2, 221–230.
- Sihombing, B., Sos, S., Si, M., Smanjuntak, K. G., Sos, S., & Si, M. (2019). *Peran kompetensi sumber daya manusia pengelola homestay berbasis entrepreneurship di Desa Silimalombu Samosir dalam meningkatkan minat wisatawan mancanegara berkunjung ke Kabupaten Samosir*. 6(2).
- Sipil, P. N., Lembaran, T., Republik, N., Nomor, I., Lembaran, T., Republik, N., Nomor, I., Lembaran, T., & Republik, N. (2006). *Gubernur gorontalo*.
- Sodik, J., & Nuryadin, D. (2005). Investasi dan pertumbuhan ekonomi regional (Studi kasus pada 26 propinsi di Indonesia, pra dan pasca otonomi). *Ekonomi Pembangunan*, 10(2), 157–170. Retrieved from: <http://ormawa.ft.uns.ac.id/repo/data/4/Ekotek/TUGAS/1/jrnal/599-594-1-PB.pdf>
- Studi Manajemen, P., & Ekonomi, F. (2011). Menerapkan etos kerja profesional dalam meningkatkan kinerja Kusni Ingsih. *Seminar Nasional Teknologi Informasi & Komunikasi Terapan, 2011*(Semantik).
- Suma, M. D., Yusuf, N. J., & Manyoe, N. (2019). Analisis banjir daerah *Ilotidea Kabupaten Gorontalo*. 2(1), 60–64.
- Syam, H., Lamangida, T., Madubun, J., Norwawati, & Akib, H. (2018). Public entrepreneurship perspective in management of the Limboto Lake In Gorontalo Regency, Indonesia. *Academy of Entrepreneurship Journal*, 24(4), 178–188. Retrieved from: [https://pdfs.semanticscholar.org/4009/c6eb83e3a4fa6ba50d94081bc019389a96ef.pdf?\\_ga=2.59018157.1222241122.1578851518-861757238.1578851518](https://pdfs.semanticscholar.org/4009/c6eb83e3a4fa6ba50d94081bc019389a96ef.pdf?_ga=2.59018157.1222241122.1578851518-861757238.1578851518)
- Trihudyatmanto, M. (2019). Pengembangan kompetensi kewirausahaan untuk meningkatkan keunggulan bersaing UMKM (Studi eEmpirik pada UMKM Pande Besi di Wonosobo). *Journal of Economic, Management, Accounting and Technology*, 2(1), 22–32. <https://doi.org/10.32500/jematech.v2i1.397>
- Trisusanti Lamangida, Haedar Akib, Muh. Firyal Akbar, M. A. (2017). Actors' role in public asset management. *International Conference on Administrative Science (ICAS 2017) Actors'*, 43(Icas), 218–221.
- Umar, I., Marsoyo, A., Setiawan, B., Teknik Arsitektur dan Perencanaan, D., Teknik, F., Kunci, K., Gorontalo, K., Danau Limboto, P., & Penggunaan Lahan, P. (2018). Analisis perubahan penggunaan lahan sekitar Danau Limboto di Kabupaten Gorontalo. *Jurnal Tata Kota Dan Daerah*, 10(2), 77–90.
- Wolok, T., Sulila, I., & Dunga, W. A. (2019). Implementasi PPDM tahun pertama bagi masyarakat pesisir Danau Limboto melalui penguatan sumber daya manusia dan iptek manajemen pemanfaatan enceng gondok sebagai produk unggulan. *Jurnal Pengabdian Pada Masyarakat*, 4(1), 71–80. <https://doi.org/10.30653/002.201941.120>