
The Systemic Design approach for regenerating the Colombian handicraft

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Every culture at global level develops different techniques to make their traditional products. communities need to meet basic needs such as food, clothing, cleaning among others, needs that increase with the population growth, exploiting in large scale natural resources for its production and an increase in the revenue of products from other regions, mostly industrial scale production, replacing the typical products by price, production capacity or market issues, generating a deterioration of the trade and local production, which ultimately affect the cultural level, because of the replacement of these local products by industrial and non territorial products.



This project focuses on creating a conceptual framework to help in solving these problems, restoring and maintaining the identity and in turn generates economic, social and environmental welfare for which is created a base model that could be replicated in other regions in the country. As a case study the town of Villa de Leyva in Colombia was taken; Nearby there is historical evidence of ancient indigenous groups, which were developed in the territory until the arrival of the Spaniards conquerors eventually became a productive, political and religious centre during the independence and since 1954 is regarded as a national heritage of Colombia.

Following the historical research done about the territory, it came to the selection of the traditional and most representative of gastronomic culture and traditional crafts activities and these analysis was performed at different levels, to select 4 with which to perform the propose model. From this, the work is done with the Ruana (poncho of sheep wool), ceramic tiles, Chicha (alcoholic beverage of fermented corn) and Besos de novia (traditional sweet).



For these four activities, the production process and the quality of its raw materials and the outputs generated are analysed, in order to measure and discover the important points where could make substantial changes in the production and in the relationship with the land and its materials. This generated 4 separate models (one for each activity) allowing to analysis their weaknesses to tackle these issues.

Were generated the systemic models tackling the problem from a holistic perspective, taking into account the needs of the territory and taking stock of the different raw materials, energy and water supplies for the development of productive activities, this served to give an idea of what activities in the territory could join the model and what should be created to supply these needs completely. A systemic macro-model, which covers all activities related to each of the systems was generated. For the models calculations of economic and infrastructure investments were also made to have a clear idea of the system and analyse the financial benefits.



The systemic model compared to the linear model increases to 65% the use of renewable energy through the use of biodigester to develop local activities. It is further reduced to 57% the use of potable water through phytodepuration and the proper use of drinking water. At the social level, jobs in handicraft activities grow (65 posts) plus the creation of new commercial activities; total economic activities in the territory goes from 12 to 75 showing that the territory has the ability to provide different products needed for craft production, in addition to the interconnection of activities in the territory that demonstrates how a systemic development models can be developed, creating not only social, cultural but also economic and environmental benefits.

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