SELECTING AND ASSESSING FAIR TRADE SUPPLIERS USING MULTICRITERIA TECHNIQUES

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Abstract

Fair Trade has consolidated itself during recent decades as a useful instrument in co-operation for development, especially for small producers in the South. However, there is some concern that a situation of dependency between the producer organisations and the organisations that market their products in the developed countries may materialise. To avoid this situation of dependency, the producer organisations must progress and develop in order to become strong, sustainable entities even in traditional competitive markets, out of the protective reach of Fair Trade networks. This paper presents the development of a holistic methodology, based on the application of multicritera techniques, and is focused on supporting the selection and assessment process of Fair Trade Suppliers so as to understand what organisations are ready to enter the Fair Trade Networks and which ones are prepared to do business in competitive traditional markets.

Keywords: co-operation for development, fair trade, multicriteria analysis

1. Introduction

A weak, maybe small producer organisation lacking in many things decides to become part of the Fair Trade circuits to find a more favourable market that will allow it easier access to the developed markets. For a time, the producer organisation changes, improves, becomes strengthened and a few years later is in a position to manage on its own outside the protection afforded by the Fair Trade market. It is now time to launch out into the traditional market and relinquish its position to another organisation in a less developed stage.

In respect of supplier management, standard ISO 9001 states: "The organisation must assess and select suppliers in accordance with their capability to supply products that meet the organisation's requirements. Selection, assessment and re-assessment criteria must be established". It is precisely these criteria that give rise to a certain complexity in the process, since in most cases their nature is eminently subjective (Ballou, 1999), hence there are marked differences when assessing a supplier as this depends on who is making the assessment.

As supplier management is of the utmost importance, it is imperative to eliminate subjectivity (Herrera y Osorio, 2006). This requires more specific tools to bring tranquillity to the decision-making process, regarding both the outcome and the intervening process.

In the current organisational environment, the multicriteria paradigm has appeared as an effective aid to organisational decision-making and management (Romero, 1993), offering a set of techniques and methods capable of taking account of the decision-making centre's

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preferences and which assist decision-making in any area of scientific research or human life. Supplier selection is not outside the scope of application of these techniques and methods.

This paper presents the development of a methodology based on the application of methods by experts and on multicriteria techniques focused towards the process of selecting Fair Trade suppliers. The paper is organised as follows: the first part explains what Fair Trade is and the need to apply multicriteria decision-making techniques to supplier assessment; further on, the model put forward for solving the decision-making problem is set out, and finally the conclusions about the model and its implementation.

2. Objectives and scope

The object of this paper is to find a validated hierarchical structure for the application of the Analytic Hierarchy multicriteria assessment method (Saaty, 1994) to the assessment and selection of Fair Trade organisations working with small producer groups in developing countries. The tool produced will allow knowing:

- which organisations are prepared to join the Fair Trade network,

- which are prepared to be sustainable in the traditional market.

This paper sets out a set of criteria suited to the design of a model to assess and grade Fair Trade suppliers that will allow identifying progress and the detection of best practices that could then be propagated throughout the studied network or other Fair Trade networks.

Extending the model to the realm of Fair Trade in both the area of supply management and the construction and application of multicriteria decision-making methodologies suited to the assessment of Fair Trade suppliers is deemed to be of great interest, not only for its practical use – already confirmed by other sectors – but also for its innovative nature that makes feasible its dissemination among the scientific community.

3. Fair Trade. Criteria, current situation and a description of the problem

Fair Trade is built on a basis of equality and transparency in labour relations that will enable the living conditions of producers in countries in the South to be improved and guarantee the consumers in the North that the products they purchase have been produced in decent conditions. The activity of producers is always sustainable in their economic, environmental and social context.

In order to reach these goals, the products are purchased as directly as possible from the smallholders and craftsmen; these are offered better remuneration for their toil and the prices of their products are fixed in agreement with the producers. The producers in the South commit themselves to working and making decisions democratically at the core of their organisations, thereby creating more participatory structures. Fair Trade is radically opposed to the exploitation of child labour and encourages women to take part in decision-making on an equal basis, the starting point always being that women and men should receive the same wages.

For their part, the Fair Trade organisations in the North commit themselves to giving products from the South direct access to the markets in the North and paying a fair price that will let the producers cover their basic needs and production costs while leaving a margin for investment.

The organisations in the North also commit themselves to paying part of the price of the production in advance to avoid indebtedness. The trade relations agreed are always medium to long term, which gives the organisations in the South sufficient time to develop and become sustainable.

The importers offer technical back-up for producing and distributing the product, such as information and assessment concerning European trends and fashions, health and safety regulations concerning the product, or the end packaging required to make it easier for the producer to gain access to the international markets. If needed, help is also provided to develop new products with finance being made available through credits and technical and administrative training. The ultimate goal is to give producers in the South an opportunity to become self-sufficient.

At the same time, Fair Trade organisations organise awareness-raising and political impact campaigns aimed at changing the present unfair international trade frameworks. Work is also undertaken to educate western society about responsible consumption and make it aware of the culture, identity and living conditions of the producers.

4. Model for assessing organisations and co-operatives and integrating them into the Fair Trade network

4.1. General framework and development of the procedure

There are 44 craftwork organisations in the Fair Trade network studied. Up to the present, the supplier relationship with these suppliers has been dependent on the organisation's level of development; however, performance in quality issues, delivery dates, and the product's success in the market has not always been satisfactory, with a considerable effect on sales figures.
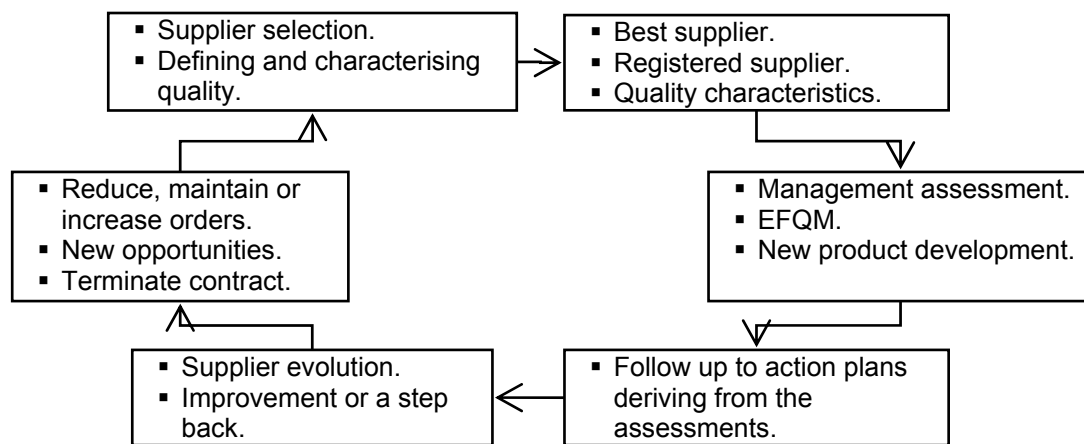

Figure 1. Continuous improvement cycle for the assurance and development of Fair Trade suppliers. Stages and expected results in each of the stages.

The solution put forward classifies organisations according to their development as an organisation, their product market share and the quality of these products, with the purpose of learning what measures to take and what budgetary amount to allocate to each organisation in line with the criteria that are most relevant for the companies purchasing products from these small organisations and co-operatives.

The procedure employed to approach the problem is set out in the figure below followed by an explanation of the results.
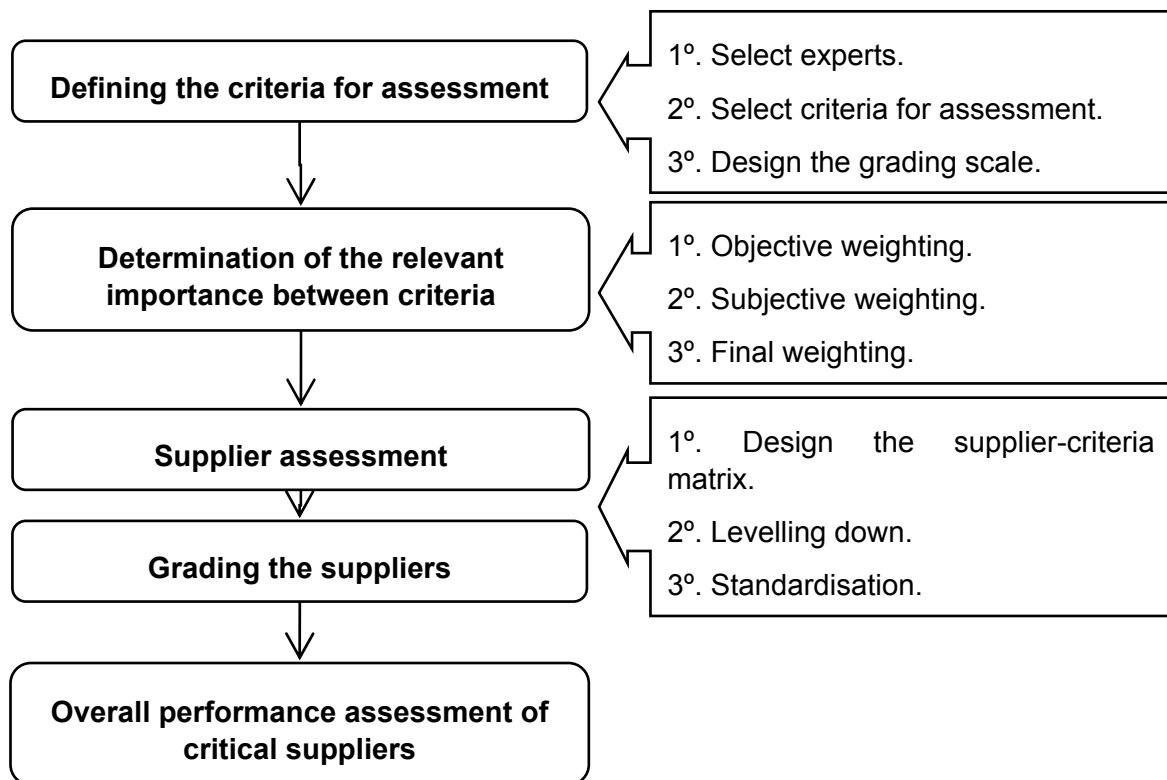
Figure 2. Procedure for supplier assessment and selection.

4.2. Defining the criteria for assessment

The organisations purchasing Fair Trade products draw up an annual purchasing budget where it is decided how much is to be purchased from each South organisation. This decision is mainly based on commercial criteria (the producer's capacity for growth, development of new products, and the market potential of its products) and on the development criteria for each of the organisations worked with. It is attempted to strike a balance between both points.

When an organisation is assessed according to development criteria it is attempted to quantify the group's key development factors. To do so, the Human Development Index (HDI) is borne in mind together with the Human Poverty Index to which the group or organisation belongs, the producer group's gender composition and the organisation's level of sustainability. In this way, purchases are prioritised from groups in countries with a low level of growth that comprise women and small groups, with little experience, with not very competitive product ranges and with hardly any sales diversification.

Another of the great challenges to be overcome consists in improving producers' compliance with product delivery dates. For this reason, it has been proposed to include **quality criteria** in the model. These criteria not only ensure that products arrive on time but that they also meet the specifications in the contract.

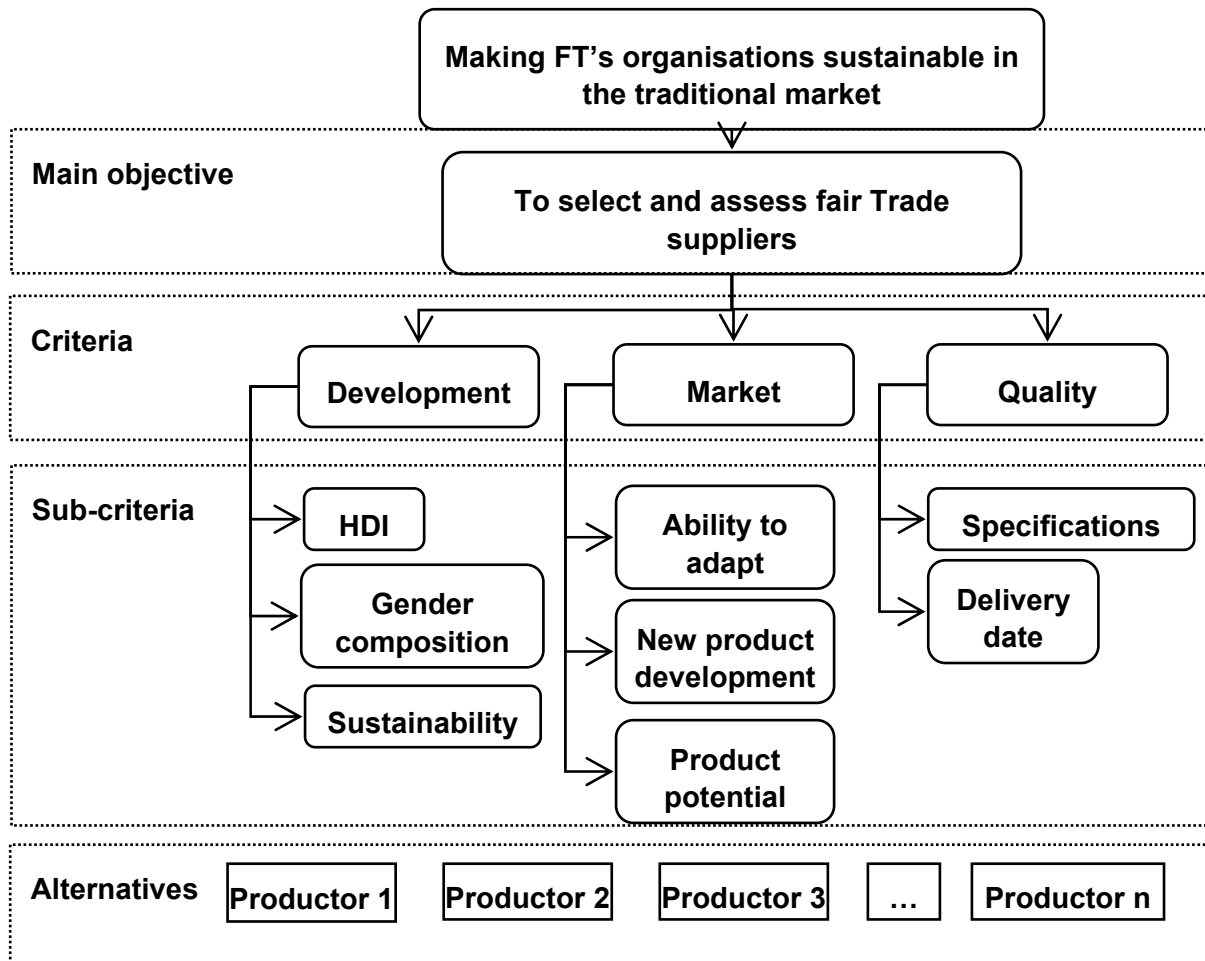The model, therefore, is designed with these criteria in mind:

Figure.3 Hierarchical structure of the problem.

4.2.1. Criteria for Development

- Sub-criterion: 'HDI'. The Human Development Index is a per country measurement drawn up by the United Nation's Programme for Development (UNPD). It is based on a statistical social indicator comprising three parameters: a long healthy life (measured according to life expectancy at birth), education (measured according to the adult literary index and the combined gross rate of enrolment in primary, secondary and further education), and decent standard of living (measured by the per capita GDP in USD).

- Sub-criterion: 'Gender composition'. The number of women with a remunerated job unrelated to agriculture has gradually continued to grow. The greatest increases have been recorded in the regions where women were less present in the labour market (in central Asia, western Asia and Oceania). The decision-making centre sets five levels for this criterion depending on the proportion of women making up the producer group, as depicted in the following table.

Level	% women in the group	a_{ij}*
Very high	95-100%	**1**
High	75-94%	**0.85**
Medium	55-74%	**0.65**
Low	35-54%	**0.45**
Very low	0-34%	**0**

Table 1. Experts' ratings for the sub-criterion: 'gender composition'.

- Sub-criterion: 'Producer group level of sustainability. In order to measure each producer group's degree of organisational progress a tool has been designed based on the EFQM Excellence management model, which comprises five criteria (leadership and strategy, financial resources and materials, people management, alliances and processes) and four indicators (beneficiary results, people results, customer results, key results) which allow identifying areas for improvement with an eye to market sustainability. The decision-making centre can score each producer group in line with the annual progress reflected in the score obtained in the EFQM model designed.

Level	Δ EFQM score	a_{ij}*
Very high	>100	1
High	70 to 100	0.85
Medium	30 to 70	0.65
Low	10 to 30	0.45
Very low	<0	0

Table 2. Experts' ratings for the sub-criterion: 'level of sustainability'.

4.2.2. Market criterion

- Sub-criterion: 'Ability to adapt' to changes suggested by the organisation. The producer group's degree of adaptability to the changes suggested by the organisation for continuous improvement.

Level	Definition	Score	a_{ij}*
Very high	Shows no resistance to change and quickly implements the required changes and proposes new improvements to remain sustainable in the traditional market	5	**1**
High	Shows no resistance to change and implements the proposed changes	4	**0.85**
Medium	Accepts the changes to be carried out but with some reluctance	3	**0.55**
Low	Shows resistance to change and finds it difficult to adapt to the changes	2	**0.35**
Very low	Shows strong resistance to change and does not agree to make changes	1	**0**

Table 3. Experts' ratings for the sub-criterion: 'ability to adapt'.

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- Sub-criterion: 'Developing new products' and innovation. The creation of new products and the ability to adapt to the demand required by the organisation.

Level	Definition	Score	a_{ij}*
Very high	The producer group regularly proposes developing new products and successfully adapts, insofar as possible to the demand for new products	5	**1**
High	The producer group regularly proposes developing new products but does not always successfully adapt to the demand for new products	4	**0.85**
Medium	Occasionally proposes developing new products but does not always successfully adapt to the demand for new products	3	**0.65**
Low	Rarely proposes developing new products and does not adapt to the demand suggested by the organisation	2	**0.25**
Very low	Never proposes developing new products and does not adapt to the demand suggested by the organisation	1	**0**

Table 4. Experts' ratings for the sub-criterion: 'developing new products'.

- Sub-criterion: Product potential'. Level of success of the products in the preceding financial year classified according to product type, sales channel, purchases, and sales and profitability of the product in the two previous financial years.

Level	Products sold	a_{ij}*
Very high	95-100%	**1**
High	75-94%	**0.85**
Medium	55-74%	**0.65**
Low	35-54%	**0.45**
Very low	0-34%	**0**

Table 5. Experts' ratings for the sub-criterion: 'product potential'.

4.2.3. Quality Criterion.

- Sub-criterion 'Meeting specifications'. Level of quality of products supplied.

Level	Compliant products	a_{ij}*
Very high	95-100%	**1**
High	90-94%	**0.85**
Medium	85-89%	**0.65**
Low	75-84%	**0.45**
Very low	0-74%	**0**

Table 6. Experts' ratings for the sub-criterion: 'meeting specifications'.

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- Sub-criterion 'Delivery date'. With the dispatch of an order, the purchaser proposes a shipping date. If the producer agrees, the purchaser will deem the delivery date to be agreed. If the producer does not accept the proposed date, they negotiate the delivery date or either partial delivery dates are agreed or a final date.

Level	Total number of days' delay	a_{ij}*
Very high	0 to 5	**1**
High	6 to 10	**0.85**
Medium	11 to 15	**0.65**
Low	16-20	**0.45**
Very low	>20	**0**

Table 7. Experts' ratings for the sub-criterion: 'delivery date'.

4.3. Multicriteria assessment applied to the assessment and selection of suppliers. Results of the model.

The different methods of multicriteria Assessment have a series of characteristics, requirements and properties that define each one individually. Likewise, the type of assessment, type of data to be considered, the nature of the objectives as well as the decision-making centre's point of view, have a bearing on the choice of a particular method (Qureshi et al., 1999). Other issues, such as computer system capability should also be assessed when deciding whether or not to use a specific method, since although the initial input information may occasionally be similar whatever method is used, certain components of its internal assessment structure may condition the way they are used (Hwang and Yoon, 1998).
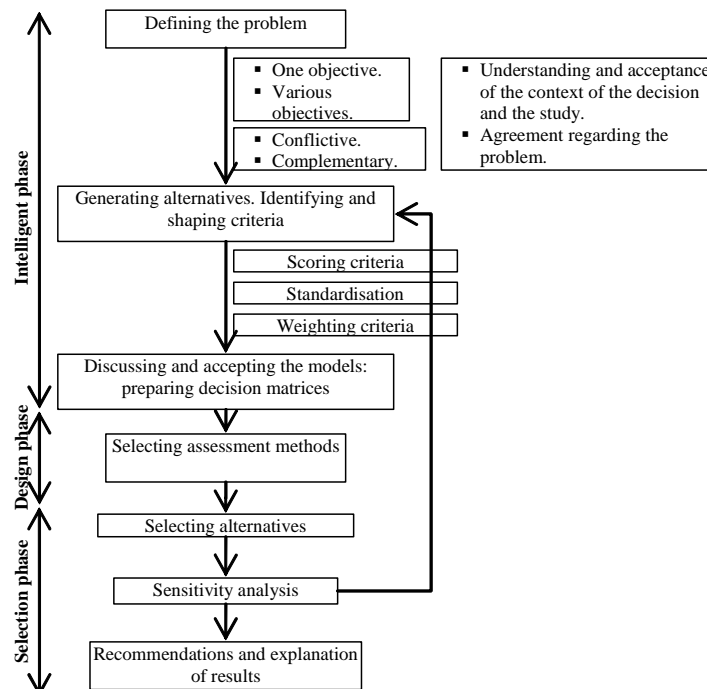
Figure 4. Phases of a multicriteria process (Barba-Romero y Pomerol, 1997; Malczewski, 1999).

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An analysis of the problem set has revealed the following aspects:

- The number of producer groups, at present, is modest and small in number (44 in this case) and it is aimed to keep this as such by providing an outlet to the traditional market for these and an entry for more needy organisations into the Fair Trade network.

- The decision will not only involve groups entering or leaving the network but also in what proportion the budget allocated for Fair Trade purchases will be distributed among the different organisations.

- Both quantitative and qualitative information is worked with.

- The decision-making centre will be made up of Fair Trade experts.

Bearing these points in mind, the Saaty Analytic Hierarchy method will be used to know what weighting is obtained by each organisation assessed in line with the criteria defined above.

Having identified the assessment method to be used, together with the different criteria to be borne in mind in the model, and having decided the weighting for each of these criteria, it will then be possible to know which organisations are best prepared to be sustainable in the traditional market and which parameters can be improved in other organisations to enable them to continue advancing in this direction. The following figure shows the weightings obtained for each organisation after applying the analytic hierarchy methodology:
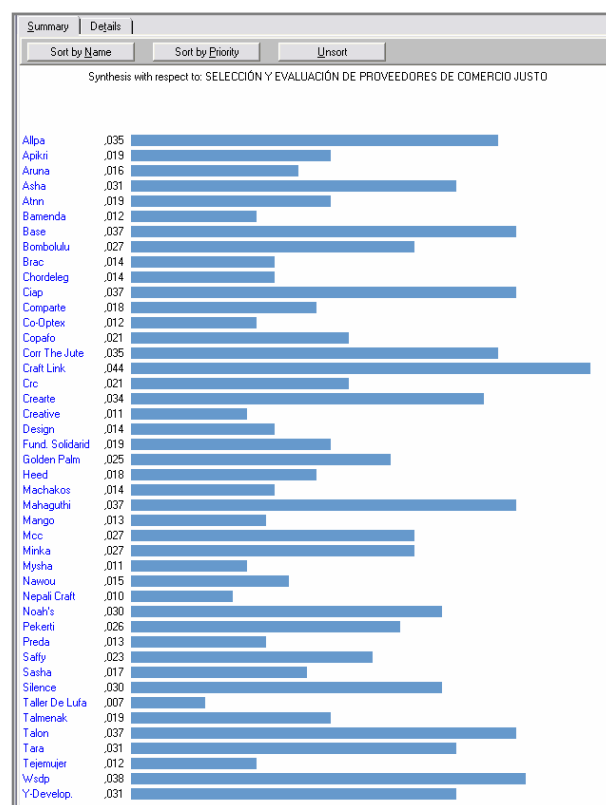

Figure 5. Assessment of alternatives regarding the general objective.

5. Conclusions

Taking into account the results of the model, organisations can be classified into four groups according to their growth rate and their product market share. In so doing, the recommendations and steps to be followed can be made for each of these groups.
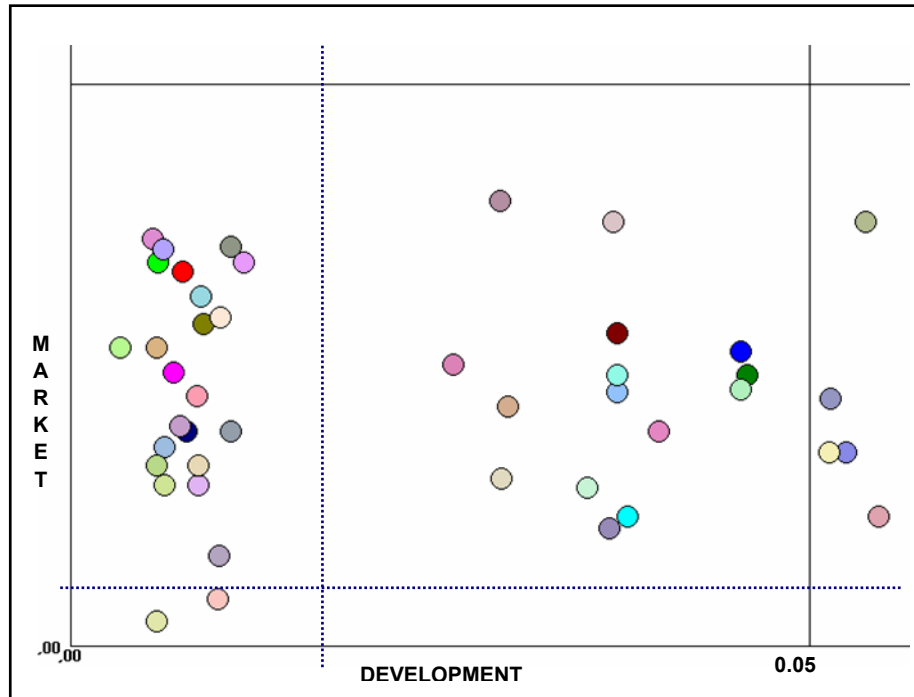

Figure 6. Classification of organisations in respect of Development and Market criteria.
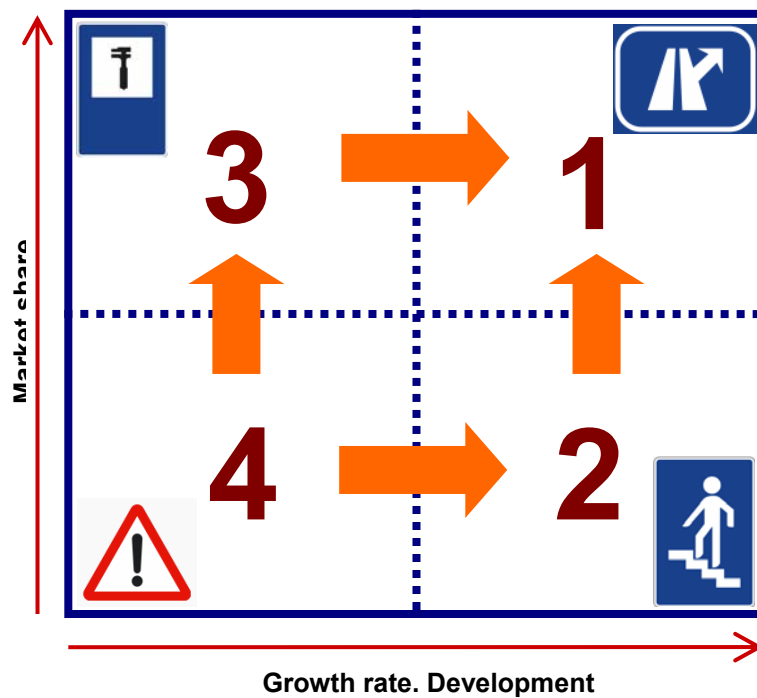

Figure 7. Classification matrix of Fair Trade organisations.

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According to the results of the model the supplier organisations of Fair Trade products can be classified into 4 types:

Type 1 organisations

⇒ Good level of organisational development.

⇒ High market share of the products marketed.

⇒ Organisations prepared for access to the traditional market.

⇒ Consultancy on international markets.

   ▪ Health and safety standards for products.

   ▪ Required certificates and quality seals.

Type 2 organisations

⇒ Good level of organisational development.

⇒ Low market share of the products marketed.

⇒ Organisations that need to improve their product to pass to level 1.

   ▪ Improvement of the process of the developed product.

   ▪ New product lines.

   ▪ Successful consultancy on other products: information and assessment on European trends and fashions.

Type 3 organisations

⇒ Low level of organisational development.

⇒ High market share of the products marketed.

⇒ Organisations that need to improve their management system.

⇒ Technical and administrative training.

⇒ Recommendations on management systems.

⇒ Indicators on progress in organisational management.

Type 4 organisations

⇒ Low level of organisational development.

⇒ Low market share of the products marketed.

⇒ Organisations at risk of leaving the Fair Trade network.

   ▪ Need to improve their management system to pass to level 2, or

   ▪ Need to improve their product to pass to level 3.

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