

Design for the real world: Sustainable design and fair trade

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Introduction

In 1998 a group of lecturers and students from the Cardenal Herrera University School of Design in Valencia decided to set up a research project which they titled "DESIGN FOR THE REAL WORLD". The objective was to develop a new operational project teaching method that would enable the development of designs for unique objects requested by groups of artisans and producers from underprivileged countries. Design can prove to be the differentiating factor when it comes to trade policies based on low prices resulting from the exploitation of workers and resources.

The artisans who take part in the "Fair Trade" production and marketing system are faced with the problem of their own survival because their production costs are greater than those of other producers in the same geographical environment. One of the premises of Fair Trade entails paying decent wages under decent conditions that are the same for men and women and exclude child labour. This involves a relative cost increase that makes it impossible to market products manufactured under these conditions without outside help.

Fair Trade is an alternative to conventional international trade based on guaranteeing producers in the South fair compensation for their work, assuring them a decent and sustainable livelihood. Fair Trade offers the workers fair pay for their work, with no discrimination between men and women.

We believe that the current international trade system heightens the differences between rich countries and poor countries, and increases the number of people condemned to live in poverty. We are convinced that this situation can be changed through Fair Trade which targets the sustainable development of disadvantaged producers who are excluded from the market.

The research group, formed by student volunteers and lecturers, studies the problems and circumstances of the producer group in question, and proposes different product designs adapted to the group's cultural characteristics and production possibilities, bearing in mind, among many other issues, their traditions and group structure, their source raw materials, their production capacity and their environment.

In our case, the “Design for the Real World” project came into being through contact with a Peruvian I.L.O. employee who told us of the subsistence problems of two Peruvian craft groups. This prompted us to collect enough money to send a lecturer and two students from the ESDI-CEU Industrial Design School off to Peru to study what action we could take on the spot.

This first step provided an important source of personal experiences. As a result of these experiences we were able to see for ourselves the enormous heuristic potential of the project because the “excuse” of design and international trade allowed us to work with terms and subjects that normally remain outside student experience in a conventional project.

The results of the trip to Peru enabled us to study the possibilities of the project and decide on the most effective approach. The study determined the viability of our intervention and we decided to work with two groups of Peruvian craftswomen fundamentally in need of financial resources. One of the groups is located in the “human settlement at Zapallal”, a “non-place” 30km from Lima. The other group of craftswomen is located at Huacho, a coastal area surrounded by marshes 100km south of Lima.

Following the success of this first phase, the project was opened up to new collaboration proposals along the same lines of design in solidarity. Requests are being received for collaboration on product design with various producer groups in India, one producer group in Sri Lanka, two producer groups in the Philippines and one in Ecuador.

The new dimension of the project evidenced the need to extend the limits of the design concept within the project even further, promoting the study and solution of problems related to production, logistics, marketing and packaging design and to inform on the project through packaging design, labelling and even point-of-sale displays.

Likewise, the project required us to expand our criteria and knowledge to embrace associated problems such as international trade systems, marketing and international law. To complete our knowledge and ensure the operational capacity of the project we asked for advice and collaboration from the Intermón-Oxfam Department of Fair Trade, who offered to provide assistance on these aspects of the project, and without whose help the project could not have commenced.



Fig 1. Project phases up to the final prototype. Sketches. Graphic representation. Prototype. (Designed at the UCH-CEU, made in India and marketed in Spain).

In the first phase of the project, apart from the benefits described above, a total of fifty objects were developed, 18 of which were finally selected by Intermón-Oxfam and are now at the production stage. These products are already on sale at the organisation's Fair Trade shops in Spain.

Project AIMS

The "Design for the Real World" project has been active for more than three years in the Projects Department of Valencia's Cardenal Herrera-CEU University. In these three years over 100 university student volunteers have collaborated on the project, as well as lecturers, designers and economists, and collaboration agreements have been signed with Intermón-Oxfam and with the Valencia Region Designers' Association. Since the outset we have worked with producer communities in countries like Sri Lanka, Ecuador, Peru, India and the Philippines and finally, after three years of hard work, we have achieved totally satisfactory results.

At present the articles designed by our team of professional and voluntary workers, and produced as Fair Trade products, are competing on the market with other products resulting from traditional marketing practices. The results of the initial experience leave no room for doubt: this kind of products are just as competitive as others designed and marketed traditionally and yet the economic and social benefits generated by them are more evenly redistributed throughout the process.

If such positive results have been achieved in a small-scale project, we are convinced that with more resources and support the project could conceivably have an enormous impact worldwide because the work methods are universal and can be applied via the Internet from anywhere on the planet.

Fair Trade is based on equality and transparency in labour relations, and this enables improved living conditions for the producers in Southern countries while guaranteeing consumers in the North that the products they buy have been produced in conditions that respect human dignity. Under the Fair Trade system the products designed by our group are purchased directly from farmers and artisans. By eliminating intermediaries, producers can receive a proper wage for their efforts and product prices are agreed on directly with the producers.

This newly conceived project has definitely awoken the interest of the scientific community, as shown by papers on the subject presented at a conference in Spain plus two conferences abroad, as well as various talks, trade press articles and television programmes.

The objectives pursued are as follows:

To develop a new pedagogical and project system that will effectively link social reality to the teaching of design, adding more depth to project methodology.

To intervene in all phases of the real project, including those bordering on other disciplines, such as the fundamentals of economics, marketing at home and abroad, professional ethics, production processes, marketing, packing and packaging, graphic design, communication and advertising, etc., so as to open up the concept of design and fair trade to its maximum practical expression.

To investigate the artisans' production capacity by means of an in-depth analysis of available technology, the education or training of the producers, their craft traditions and cultural skills, and the possibilities of their industrial and economic environment. The project evidences the need to adjust design to the determining economic and production factors, with the final solution only being reached through the evaluation and study of these factors.

To propose possible improvements in the production processes. This requires an important technical knowledge of the production systems used, which may be very basic and traditional or structurally complex.

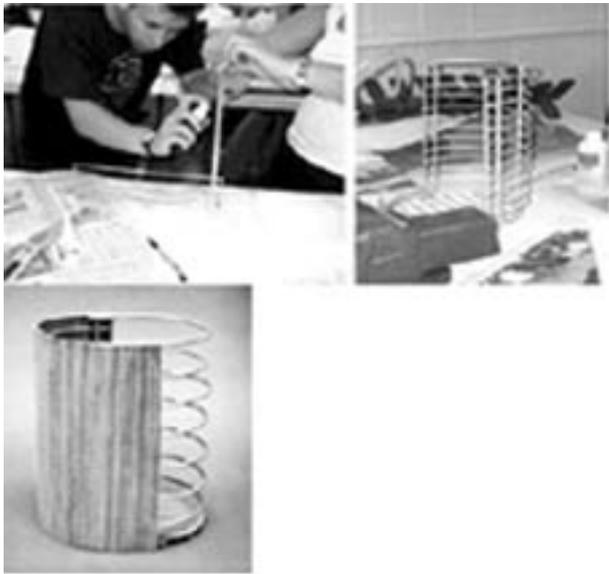


Fig 2. Student volunteers making a prototype E:1/1

To determine which markets are most receptive to the fair trade system, depending on the possibilities detected. Adapting the design to the needs of the target countries or regions, which entails in-depth research into consumer idiosyncrasies.

To consequently design objects capable of being produced easily within a particular cultural and production environment, without their production entailing an insurmountable effort or having negative repercussions on the environment.

To assist in the production of the objects proposed. Learning from the monitoring of the production phases and putting forward solutions to any problems that may be detected.

To create a new model of “professional solidarity practices” of an international nature, by enabling students to carry out their practical training and finals projects with producer groups.

To collaborate on introducing knowledge management systems into university education which are more sustainable and more solidarity-oriented than those of the last century. The development of a research project under an international solidarity “fair trade” system entails an added project difficulty, but also an important and unprecedented contribution to the world of university research into industrial design.

To analyse critically the pros and cons of the system created and extrapolate its results for reinvestment in the formation of a new culture of trade and design, and in the successful outcome of new projects.

To make the scientific and academic communities and consumers aware that there is a sustainable and “equitable way” to understand product design, trade and consumer habits.

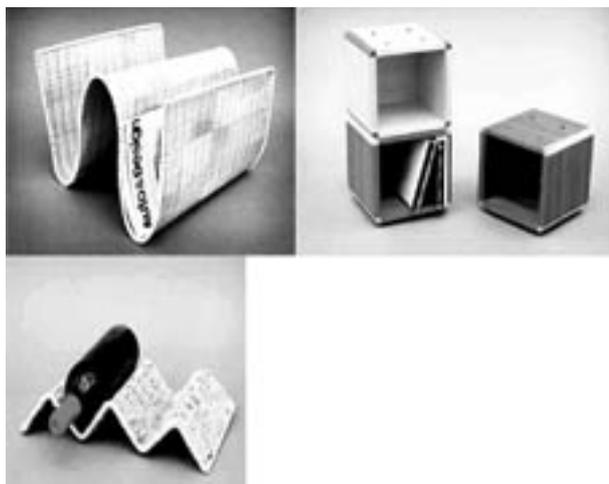


Fig 3. Example of designs created during the project.

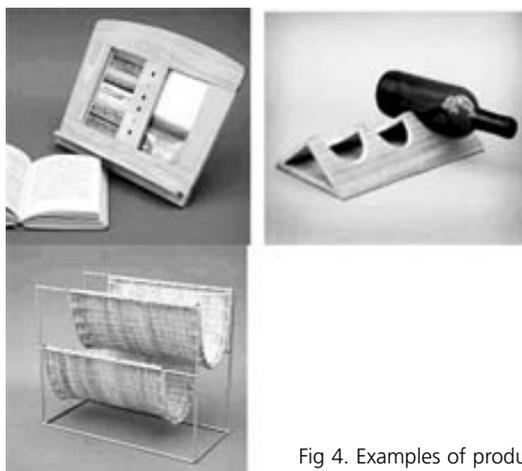


Fig 4. Examples of products made during the project.

Methodology and work plan

To undertake the design research project in **Peru** (human settlement in Zapallal and Huacho) **India, Sri Lanka, the Philippines and Ecuador**, we first have to know each producer group's needs, how they live, how they are structured, what the environment is like, what their possibilities are... These are their general characteristics:



Fig 5. Various designs proposed for the Zapallal group.

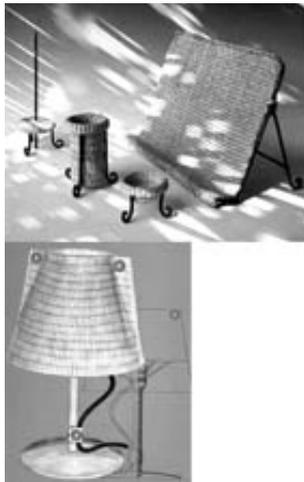


Fig 6. Various projects for using reeds in Huacho.



In **Peru** there are two producer groups in need of our proposals. Of these two producer groups in Peru, the **Zapallal group** requires various "industrial" design projects for objects the artisans are capable of making, although they have no means of production other than their hands. The major problem is that the only raw materials that they can work with are fabric and desert sand.

The project method used has to be capable of producing designs that can be created and produced with sand and fabric, with an automatic sewing machine as the only mechanical production equipment.

The **Huacho group** is a little more organised and occasionally produces objects made from reeds (toquilla straw), the only raw material they have access to. This group basically made a living by producing "chanclos" for Japan at very low prices, until for well-known political reasons, from one day to the next, the Japanese stopped buying and the Huacho producers failed to find a substitute product. Our task consisted initially in carrying out market research that would lead to a viability study for different designs. Subsequently, as a result of this research, different proposals would be put forward for reed lamps and writing materials.

The **producer group in India**, commercially known as "Asha", is the most organised of those we worked with, but for this group, as for others, working under "fair trade" conditions proves comparatively costly and business is poor, because they have to compete with other producer groups in the same area that fail to respect human rights and pay their artisans extremely low wages. Our task consists in providing them with original designs that, despite their production handicap, will be sufficiently original and suited to the commercial and production objectives to justify the price. This group works fundamentally with excellent quality wood (sesame) and the level of the artisans is high, producing items featuring carving or metal inlays of high quality, though little appreciated in developed countries.

Fig 7. Designs for writing materials made by the student volunteers.



Fig 8. Designs for occasional tables, wastepaper baskets and an umbrella stand in rattan core (woven by the students).

The **producer group in the Philippines** works under the trade name “Safi”, using wrought iron and rattan core as its basic production materials. Their installations are poor but their level of organisation is quite good. Their craft work in rattan is excellent, although the standard of their finishes is rather poor for European tastes. Our task will consist in designing new items in these materials that must not exceed a certain price, as otherwise they cannot be sold.

There is also work to be done with a **craft group in Sri Lanka** who need designs for children’s items and toys in medium density fibreboard, or MDF, the material they usually work with. Their technological level is not high, but neither is it lower than that of many small firms in our own environment. The fundamental difference lies in their production and services environment, which is non-existent. This group stands out for its ability to produce excellent hand-painted finishes for their designs, which is their major competitive advantage.

At present we intend to launch a comprehensive collaboration program with seven producer groups in **different parts of Ecuador**, with whom we will be working for a minimum three-year period. Our objectives currently centre around a producer group from the province of Otavalo that manufactures products derived from the pulp of a kind of marrow called “Luffa”. Physically, this vegetable material is similar to dried sea sponges. This producer group occasionally works with balsawood and terry cloth.

The different **tasks of the work plan** are:

Knowledge of the production, economic, social and political environment of the producer group. Up to now this knowledge has come from external data supplied by the Intermón Oxfam Foundation, among others. On-site research would be much more appropriate but this would require funding. Our aim is therefore to visit the craft groups at the beginning and end of each new project.



Fig 9. Human settlement at Zapallal, in Peru. Photograph by Marusela Granell

Project organisation, detection of objectives and proposals for work distribution. The less we know about the producer groups we are to work for, the more complicated this point proves. It is very difficult to obtain technical data on the production system, materials, tools, etc. at the start of each project, which is precisely when this information is required.



Project briefing. The characteristics of each individual project change depending on the producer group involved. Sometimes the technical abilities of the craft groups reveal slight but significant differences, so it is very important to properly define the determining factors that the projects

Fig 10. Tools for working with reeds.



Fig 11. Craftswomen from Huacho and traditional embroidery work from Zapallal.



Fig 12. Design process for a lamp in iron and reed.



Fig 13. Sketch and prototype of umbrella stand designed at the UCH-CEU university for production in the Philippines.

present for each group. These briefings are used to compile the work proposal that all the designers who intend to work on the project will receive over Internet, using the project web site.

Devising the design proposals. In most of the projects to be carried out the technical complexity of the products is not very high, although the implications for the purely formal design of factors related to human economy, production, marketing, etc. make the project highly interesting scientifically and extremely complex professionally.

Studying the graphic representation and communication of the proposals. Once the idea begins to take shape, it is necessary to produce it graphically via different graphic settings and universal media. When working in different cultural environments efficient communication entails working with very precise and at the same time very "easy"-to-interpret representation systems.

Technical evaluation of the viability of proposals. After studying the graphic material generated, the proposals are analysed for technical viability. Volunteer students receive help in studying the production systems used for the proposed design and adapting them, if possible, to the technical possibilities of the producer groups.

Redesign and final design phase. For this phase of the research we need to have sufficient technical material to make the three-dimensional prototypes. These prototypes reproduce or suggest functional behaviour patterns that are extremely useful for predicting how the final piece will work and ensuring that it does.

Shaping and technical representation. A technical drawing of the proposal is necessary for the precise definition of the all the technical features of the design. It is the means to ensure proper communication with the artisans without any misinterpretations. The final design will be made using the data provided by these plans. However, due to the enormous cultural and educational differences between our world (environment) and the world of the producers, and owing to the communication problems necessarily involved in the project, we have noticed that an over-rigorous and inflexible attitude on our part has the potential to bring the project to an inexcusable standstill. Obviously this can only be solved by excellent communication and mutual understanding between the student designers and the producers.

Making the full-scale prototype. Following the internal assessment of the proposals, and taking into account wherever possible the last-minute adjustments the design requires, prototypes are made of all the proposals

presented. The researchers themselves have to go through the same steps the artisans are expected to take, so that they personally experience the pros and cons involved in producing their design proposal. This also obliges them to relate the mental proposal to the technical solution, so that, when creating a design, they also visualise the building process and incorporate easy solutions as part of the proposal's attractiveness.



Fig 14. Full-scale prototypes for wastepaper basket and magazine rack.

Marketing back-up actions. The marketing organisations involved in the sale of fair trade products will require graphic back-up to make the campaign more effective. Once accepted for sale, the selected piece sometimes requires an individual study of the container that will house it, both from the physical and graphic point of view, and occasionally with regard to its promotion at the point of sale.

Project benefits

The projects carried out during this research project are set in the midst of an extremely harsh trade reality consisting of obtaining competitive results in the first world while working with disadvantaged producer groups from the third world. We can therefore think of the project determinants as an experimental field where only good initiatives bear fruit.

Thus we can conclude that the methodological systems applied in this project are potentially transferable to any economic project that incorporates similar design and marketing criteria in a less critical environment, making it a reliable system for the furtherance of sustainable knowledge.

As our aims for the project gradually became satisfactorily fulfilled, we also began to feel satisfied with our personal commitment as teachers and designers. We have succeeded in giving the producers access to designs that they can make, despite their limited resources, and that our consumer society wants to purchase, in spite of their being crafted by artisans from different cultures. Moreover, we have established channels to ensure suitable sale of these goods. And all this has been achieved within the conditions of fair trade, something that was unthinkable a few months ago. We must remember that during the Latin American summit meeting held in Madrid in early May 2002, the least developed countries requested that production aid should be accompanied by a commitment for open markets, since production aid packages would be of no use to them if the very same countries that have helped them simply turn around and close their borders to their goods.

Our project will open up new development channels in international fair trade, by incorporating industrial design into the most elemental economic and production processes in order to act as a “spring” element between the economic, technical, cultural, social and production differential of countries in the north and south.

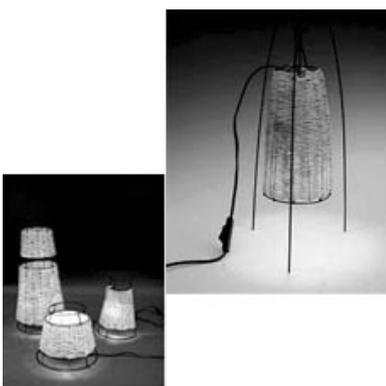


Figure15.

ALL THE DRAWINGS, PROTOTYPES AND MOCK-UPS FEATURED IN THIS DOCUMENT WERE CARRIED OUT BY THE FOLLOWING STUDENT VOLUNTEERS:

Rafael Román Romero. Sara Lucía Martínez Álvarez. Sol Vicente-Almazán. Andrés Domingo Vicente. Julia García Pont. Vicente Claramunt Llebres. Agustín López Gallego. Carlos Bermejo Martínez. Ramón Prats Burguera. Santiago Agustí Piles. Mihaela Panayotova. Laura Blasco Aguado. Mari Carmen Barres Esteve. Laia Alós Palop. Laura Cerro Raimundo. Juani García. Cecile Placier. Jon Peill. Zaida Signes. José Manuel Ferrando. Alejandro March. Luis Llorens. Julian Romero. Idoya Muñoz. Maite Martinez. Rafael de la Selva. Arantzazu Lazaro. Carolina Ros. Magda Gomez. Laura Alandes. Francisco Lluesma. Jorge Ruiz. Alfonso Porcar. Gema Ortiz. Rebeca Saez. Enrique Larruy. Roberto Rejon. Ana Garcia. Fran Ilanes. Elisa Rodriguez. Inma Bermudez. Amparo Brotons. Laura Zapata. Maria Sanchis. Raquel Plaza. Jorge Mayor. Pablo Aparisi. Javier Esteve Hinarejos.

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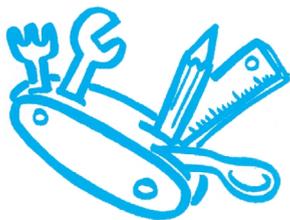
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