

Design in India: The Importance of the Ahmedabad Declaration

Introduction by S. Balaram

The Ahmedabad Declaration is a crucial document in the history of modern design in India, although time often has overshadowed its importance. It is necessary to quickly touch upon the beginnings of design in post-independence India before one views the events that led to the historic document.

Design as an activity in India is as old as its culture, but as a modern profession it started only in the late 1950s, barely a decade after India became (in 1947) an independent nation and the largest democracy in the world. In 1957, the then Prime Minister of India, Jawaharlal Nehru invited the eminent designer couple from America, Charles and Ray Eames, to advise the Indian government on the appropriate design activity that could help India's vast craft sector and small-scale industries sector in the transition to the era of industrialization. Nehru was strongly committed to the industrial development of India; not in a narrow way of imitating the already industrialized nations, but in a broad way of finding one's own solutions. Without Nehru's foresight and courage at a time when the preoccupations of recent independence were overwhelming, the appropriate viewing of design as an element to improve the quality of life could easily have been lost in the rush towards rapid industrialization.

In "The India Report" (1958), the Eames had recommended for this newly emerging independent nation a change in kind, and a change not merely in degree. They called for "a sober investigation into those values and qualities that Indians hold important to a good life, and for a scrutiny of the elements that make up a standard of living." The report recommended the establishment of a National Institute of Design which could train designers capable of generating "an alert and impatient national conscience that is concerned with the quality and ultimate value of the environment."¹

Thus, the National Institute of Design (NID) was established in 1961 by the Government of India as a national catalyst for design awareness apart from being an institution for research, service, and training in various fields of design. Notably, it was put under the Ministry of Industries and Commerce to connect it to industrial production, rather than under the Ministry of Education where educational institutions are normally placed.

1 Charles and Ray Eames, "India Report," National Institute of Design, 1958.

NID was created as an experiment with complete autonomy. This is because Eames stressed that India should conduct its own investigation and find its own solutions instead of copying models of developed nations.

The choice of the City of Ahmedabad for establishing NID, and later for the declaration named after the city is significant. Ahmedabad is a true representation of India in its synthesis of old and new values. On the one hand, it is known for its traditional Mogul monuments, but it also has the rare architectural works of modern master architects such as Le Corbusier and Louis Khan. It is one of the well-known craft centers in India, but it has India's major corporate giants as well. On the other hand, it has the conventional primary schools, but also top research and higher education organizations such as the Indian Space Research Organization, the Physical Research Laboratory, and the Indian Institute of Management. Even more important, Ahmedabad is a city associated with the life and work of Mohandas Karamchand Gandhi, who is known throughout world as Mahatma, the great soul. Gandhi believed that all economic activity must be judged in terms of human values. In this respect, Gandhi's approach is a guide to designers everywhere because it proposes "that designers all over the world today accept as the true measure of their professional worth: the design of products, and systems (and communications) which reflect an understanding of real human needs; which respect the environment in which they are manufactured and utilized; and which can serve to enrich the quality of life for those millions whose needs and aspirations are not served by the dictates of lifestyles founded on the creation of wants, rather than (served by) an understanding of needs."²

NID started offering regular undergraduate education in design in 1970. The idea of holding an international meeting in India, a developing country, was born in 1977 at the 10th International Congress and Assembly of ICSID (The International Council of Societies of Industrial Design) held in Dublin, Ireland. It was Ashoke Chatterjee, the third Executive Director of NID, who pointed out that the majority of the ICSID membership represented industrially advanced economies and "at a time when only few developing lands have felt the need for design as a motive force in their economic improvement," ICSID had to recognize that the real test of design lay in its contribution to the development process. He even added in parenthesis that NID's annual membership fee to ICSID was equivalent to the school's entire budget then for research and for fellowships. Until then, ICSID had never held its congress in any developing country.

There are other factors that supported the idea of an international meeting on design in India. In 1997, NID also won the ICSID-Philips award for design for development, which put NID and India in a positive light within the international design community. Earlier, in April 1977, a memorandum of understanding was

2 Babubhai Patel, Inaugural address at the UNIDO-ICSID meeting on Design for Development, 1979.



Figure 1

The figure and logo of UNIDO-ICSID meeting.

signed between UNIDO (United Nations Industrial Development Organization) and ICSID to jointly accelerate industrial design activities in developing countries in order to satisfy urgent needs in this field; and to carry out as extensively as possible the promotional activities necessary to alert developing countries to the advantage of including industrial design in their planning process. These circumstances and Chatterjee's efforts culminated in UNIDO, an organization committed to development, and ICSID, the apex design body; joining hands to support an international meeting in India with the theme "Design for Development." Its sole objective was the promotion of industrial design in developing countries.

This decision was received with great enthusiasm by the design community in India, particularly at the NID. There was excitement in the small NID community, which was determined to organize this rare international meeting to the best of its abilities. Preparations started a year in advance in 1978. An organizing team was formed and the author, who was then Chairman, Extension Programs, was appointed as the Chief Coordinator of the meeting. In the typical NID way, the whole institute, faculty, and student body, along with outside consultants, worked together on this mega project. Government support both at the centre and the state levels was mobilized because such an international meeting involved national prestige.

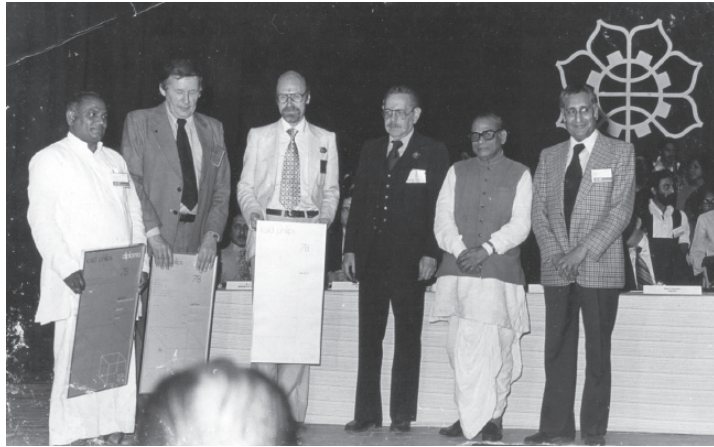
NID also extended its hand to the Industrial Design Center (IDC) at the Indian Institute of Technology, Bombay, then the only other design institute in the country, to join the event. The meeting was planned to start at NID and end at IDC. As Chief Coordinator, I was conscious of what was at stake for us internationally, and wanted to make sure that we held our heads high. I formed many groups to undertake the various tasks. Every task had been thoroughly detailed, and every day progress meetings ensured that problems were shared, resolved, and that everyone was involved. Professor S. M. Shah designed the logo for the meeting, and created a special identity for all the stationery and environmental graphics (Figure 1).

Two great men, both now gone, were significant in their advisory support to the event and the teams. These were Professor Ravi Mathai, then Director of the Indian Institute of Management in Ahmedabad; and Romesh Thapar, eminent journalist, thinker, and then editor of the journal *Seminar* in Delhi.

Both Mathai and Thapar were deeply concerned with design not being seen as an economic force and an expression of contemporary values. They wanted the UNIDO-ICSID meeting to underscore this aspect. As a result, long before the meeting there were campus meetings, and a dry-run seminar was held during 1978 by groups of Indian designers, design students, and planners to articulate the Indian experience to be projected at the UNIDO-ICSID

Figure 2

The inauguration ceremony.



meeting in front of eminent international designers. The questions raised at these meetings echoed around the world. They included:

- How does the Indian designer define his/her role in what are his/her priorities?
- How can the Indian designer assist national efforts to improve the quality of life for such vast segment of humanity?
- What is right design for a “real world” full of hunger, illiteracy, and ill health?

Indian experience is full of promise, conflict, and contradiction. India is very new to the concept of the designer as a serious professional, trained in several disciplines and functioning in a variety of work situations. Design is widely misunderstood as patternmaking, styling, or a fine art, or it is confused with engineering design and plant layout.

This misunderstanding is very deep-rooted. Yet India was the first developing nation to take a conscious step towards utilizing design as an important tool in its development.

The UNIDO-ICSID meeting was titled “UNIDO-ICSID INDIA 79.” “Design for Development” was its theme. It was a ten-day event, which took place from January 14 to 24, 1979. Since India is a pluralistic society, the UNIDO-ICSID meeting also was designed as a pluralistic event.³

Apart from the usual paper presentations and a variety of Indian food and cultural programs, there were field visits to craftsmen’s work-homes, to small industrial estates, and to major corporations. There were experiences of village life and village food. There were walks to heritage buildings and visits to museums. The event was planned to begin with an open-to-all, informal kiteflying festival in Ahmedabad, and to end with sightseeing in Bombay.

The deliberations started with an inspiring keynote address by Romesh Thapar on “Identity in Modernisation” and

3 By a “pluralistic event,” it was meant that the activities were more than just the deliberations. The meeting was conducted at two venues: cities selected for their differences in the cultures of living and working. There was kiteflying by all, traditional “Garba” dance, visits to craft peoples’ homes, visits to small and medium industries, student work presentations, visits to rural homes, eating rural cuisine, heritage walks, workshops by small groups, and sightseeing.

Figure 3

Iswarbhai Patel receiving the first ICSID award for design for development from the Chief Minister of Gujarat, Babubhai Patel.



concluded with a collective “Ahmedabad Declaration and Major Recommendations,” which was later published by NID.

The UNIDO-ICSID meeting was attended by delegates from thirty-seven countries. Some of the participating countries included developed nations such as the United States, Russia, Germany, Japan, England, and Austria; as well as developing nations such as India, Pakistan, Sri Lanka, Malaysia, Thailand, Turkey, Brazil, and Argentina. The delegates who attended included noted designers, architects, planners, environmentalists, academicians, and thinkers.⁴

Notable speakers among the Indian participants included Romesh Thapar, Laurie Baker, Rajni Kothari, Ravi Mathai, Pupul Jaykar, Kumar Vyas, and Sudha Nadkarni. Foreign participants included consultants from UNIDO and ICSID, and delegates from the various countries. Eminent design thinkers such as Victor Papanek (United States) and Herbert Ohl (West Germany) attended. Prof. Gui Bonsiepe (Argentina), Yusuf Mazhar (Egypt), and John Reid (England) were included in the UNIDO consultant group, while Yuri Soloviev (Russia) and Carl Aubock (Austria) represented the ICSID consultant group.

Keynote speaker Thapar demanded from the designers a value system that had to underpin the societies they were living in. Arguing for not losing one’s identity in the rush for modernization in the global marketplace, he said, “Take this overcrowded land, a complexity human and organizational, still limited by resources, but determined to texture a society which is self-reliant and comparable to the best. Obviously, it cannot be done in imitation. What has been done for populations of a hundred or two-hundred million cannot be done for one-thousand million.”

“In terms of a future vision of the good life, we will have to draw upon the great heritage of world knowledge and experience to create a discipline of modernization which dissolves the divisions between the rich and the poor, the contrasts between waste and want, and the repetitive patterns of ugliness and beauty which constitute

4 “UNIDO-ICSID Meeting papers (five-volumes),” S. Balam, ed. (NID 1979, unpublished).

Figure 4
Arthur Pulas with a young
NID faculty member.



the violated environment of our planet. The only weapons we have are our sensitivity and creativity. Let us recognize them, sharpen them, and mobilize them for engineering the societies of tomorrow.

“The problem of identity in the Third World is complicated by the wide gulf between the elites who are culturally at bay, and the people, who have preserved their aesthetic consciousness. And the designer inevitably belongs to the former. The two will have to come together if the quality of our life and environment has to answer our contemporary needs.

“Let us design many modern ways of living, each interacting with the other, but self-reliant, with genuine respect for difference.”⁵

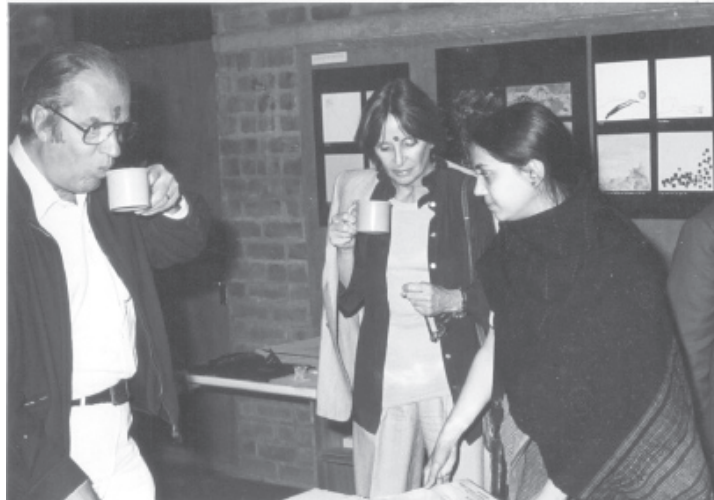
The other Indian speakers stressed the need for stronger links between design and crafts, a major development issue in India. They also stressed the need for recognition by the major national industries and, most important, the need for a national statement of policy on design by the government, which could provide the basis for a national consensus. It also was felt that there was great dearth of documentation of traditional design in India, and that publications in the field of design were nonexistent. Gui Bonsiepe, in his paper “Industrial Design in Latin America,” strongly argued that design must be used as a tool for the reduction of social inequalities. Referring to his work in Argentina, he pointed out that there must be stress on design for product development to serve small industries that cannot afford designers. This capability should come from service centers for product development, which could start a small workshop for this purpose.

Yusef Mazhar, in his paper “Industrial Design at the EIDDC,” explained the need for design exposure programs through polytechnic institutions. John Reid, in his “Proposals for Industrial Design in India, Pakistan, Egypt, and Turkey,” emphasized the requirement of common facility centers for design

5 Ibid.

Figure 5

Delegates in discussion with a young NID faculty member.



service to small industries, libraries, and publications on Design.” He stressed the development of intermediate technology centers for industrial design.

Yurie Soloviev, in his paper “Evolution of Industrial Design in Developing Countries,” pointed out that designers in developing countries should not copy designers from industrially advanced nations, but rather take into account their own specific issues of local production and consumption conditions.

Carl Aubock, presenting “The Role of Industrial Design in Developing Countries,” focused on preventing “brain drain” in design know-how from developed countries. This could be done through the exchange of experience, and technical assistance on a regular basis. He further said that developing countries must evolve an adequate technology and infrastructure for industrial design that is simple, inexpensive, labor-intensive, and compatible with basic socio-cultural patterns.

Most delegates stressed that industrial design must take place at several levels simultaneously, reflecting a multidisciplinary approach.

It was felt that the education system within these industrial design centers should be geared to bring out “job creators,” and not “job seekers.” Designers should be resource generators—not resource users.

All of the delegates supported the “service” component of design centers, which would be located in design schools. There was a consensus that these design centers should develop “people with skills,” rather than “skills for people.”

The UNIDO-ICSID 79 meeting was a significant milestone in the progress of the design profession, since it marked the first design conference ever to be held under the auspices of the United Nations. Most of the papers were country papers explaining their experience with design. The real thinking happened only during the discussions that followed each of the presentations.

The meeting was carefully managed to lead to a tangible document, approved by the international delegates, which could be a powerful tool in promoting design in respective developing countries everywhere in the world. This document was the “Ahmedabad Declaration,” following the precedent of the Lima Declaration and World Plan of Action that UNIDO issued in 1975.⁶

The Ahmedabad Declaration’s full title was “Ahmedabad Declaration on Industrial Design for Development.”⁷ It was divided into two sections:

- (1) Ahmedabad Declaration, which consisted of (a) a declaration, and (b) a plan of action.
- (2) Major recommendations for the promotion of industrial design for development.

These recommendations covered seven important areas of design for development:

1. Recommendations for design policies;
2. For design promotion;
3. For government action;
4. For action by industry;
5. For information requirements;
6. For education, training and, extension in industrial design; and
7. For international cooperation.

Copies of this publication were widely circulated, particularly in the offices of the Government of India.

In Chatterjee’s words: “The declaration articulated a global mission for design that designers in every part of the world must work to evolve a new value system which dissolves the disastrous divisions between the worlds of waste and want, preserves the identity of peoples, and attends to the priority areas of need for the vast majority of humankind.”⁸

The conference suggested actions essential to the achievement of the Declaration, and these were endorsed by UNIDO. Several national and international institutions used the opportunity to reinforce the thinking that had begun to emerge through Europe’s “green” movement, pointing out that the “world of waste” was being rejected by the very societies that spawned consumerism. The 1979 Declaration should have been a watershed event for design in India, inspired as it was by the Indian experience. Yet in India, the “Declaration” remained largely as a statement of intent and less as a thing of achievement. It came at the opening of a decade that was to reject the socialist paradigm, and what many regarded as its Gandhian baggage. Instead, national policy turned towards global and domestic competitiveness, and to measures that could stress international market success as the new hallmark of self-reliance.

6 What is the Lima Declaration? The Lima declaration and world plan of action was issued at the second general conference of the UNIDO in Lima in March 1975. It calls for the redistribution of the world industry so that developing countries would have 25% of industry by the year 2000. To close the gap between rich and poor nations, the developing countries need to grow faster than the developed countries. The Lima Declaration asks the developed countries to eliminate trade barriers and ensure that the economic and social aims of developing countries are upheld by the transnational corporations. The Seventh Special Session of the General assembly September 1–12, 1975. Issues and background, New York, United Nations, 1975, 22–23. <www.gwb.com.all/gwb./news/lima/index.html-4k>.

7 National Institute of Design “Ahmedabad Declaration on Industrial Design for Development and Major Recommendation for the Promotion of Industrial Design for Development,” NID 1979.

8 Ashoke Chatterjee, “Design in India: The Experience of Transition,” *Design Issues* 21:4 (Autumn 2005): 4–10.

9 Ibid.

Design began to move into the center of corporate strategies, and a profound semantic shift accompanied that movement.⁹

As a follow-up, in 1980, a group was formed under the leadership of Ashoke Chatterjee consisting of members from NID (National Institute of Design), IDC (Industrial Design Centre), Society of Industrial Designers of India, and practicing Indian designers to work on a proposal for a “National Design Council” and related promotional activities by the Government of India. This document was finally submitted to the Planning Commission for its consideration for inclusion into India’s five-year plans.

Subsequently, presentations also were made to the then Finance Minister Madhu Dandavate of the ruling party “National Front.” These efforts, however, did not yield the expected results mainly due to two reasons: the rapid political changes at the government level, and the Indian business community’s perception of design as a peripheral activity.

In spite of the NID efforts from time to time, this perception remained until India in the 1990s gave up its over-protective economic and industrial policies, and allowed liberalization and globalization to bring in the new consumer culture. With this, “Design awareness accelerated at a speed that would have been impossible to even imagine at the time the Ahmedabad Declaration was signed. Designers who had been urging industry for years to acknowledge the centrality of their role now were being challenged to deliver design of quality and at a speed entirely new to their experience.”¹⁰

There were other major changes that affected the design profession in India in an unprecedented way. These included the information technology revolution, the Internet, the gigantic media boom, and the communications revolution initiated by the cell phone.

The value system brought in and aggressively promoted by these changes was quite different from what the Ahmedabad Declaration stood for. Nevertheless, the changes certainly set the stage for an imminent national policy on design.

Such a time was the year 2000, when India started ascending economically, that Dr. Darlie Koshy took over as the Executive Director of NID and started building strong bridges with the government, as well as with Indian industries, through the Confederation of Indian Industries (CII), the country’s most powerful industrial arm.

In 2004, *BusinessWeek*, a popular Indian journal, established the NID-CII Awards for the best designs and the best designers in various product categories. The jury members included well-known design professionals from India and abroad. The media coverage for this event gave Indian design and designers a great impetus.

CII with NID also started yearly national-level seminars on design in various Indian cities. The outsourcing boom, which started

10 National Institute of Design, “Ahmedabad Declaration on Industrial Design for Development and Major Recommendation for the Promotion of Industrial Design for Development,” NID 1979.

in the information technology sector, gave India great confidence that this phenomenon could happen in the design sector, too.

Harvard Business School Professor Robert Hays stated: "Fifteen years ago, companies competed on price, now it is quality, and tomorrow it is design." This statement impressed Indian industries and the Indian Government. The enormity of demand for Indian design, and the inadequacy of supply in the country became apparent. The huge number of designers trained every year in rapidly growing neighbors such as China and Korea started worrying Indian industry.

It was in this context that the Indian Government seriously viewed the proposals for a National Design Policy, which was drafted and submitted by the National Institute of Design. The draft "Design Policy" was revised on October 7, 2005, and the Ministry of Commerce and Industry released it publicly on October 31, 2005, inviting comments and suggestions by the Indian design community. Subsequently, a national-level seminar was held to discuss the draft, which was drawn up as a multipronged strategy to enhance the competitiveness of Indian industry through design. It clearly laid down action plans, deliverables, and outcomes for the next five years, which is the planning duration in India.

Finally, on February 8, 2007, the Union Cabinet approved the National Design Policy; whose beginnings lay in the Ahmedabad Declaration and major recommendations.¹¹

The highlights of the vision for the National Design Policy are:¹²

1. Design promotion and partnerships across many sectors, states, and regions for integrating design with traditional technological resources;
2. Presentation of Indian designs in the international arena;
3. Global positioning and branding of Indian designs;
4. Raising Indian design education to global standards of excellence
5. Making India a major hub for exports and outsourcing of professional design service;
6. Creation of awareness of design among manufacturers and service providers, particularly small, medium, and cottage industries; and
7. Attracting investments in design services and related R&D (Research & Development).

Some design thinkers believe that the policy does not cover many areas and is lopsided. Furthermore, they feel the policy is narrowly focused, and the kind of design India really needs is a design for new changes and new processes.

The policy also does not address the vast craft community, which is facing tough human survival problems. The policy simply

11 Ibid.

12 Government of India, "National Design Policy" (Accessed February 8, 2008: <http://www.designindia.net>).

copies the kind of design that the developed world practices, without caring for the Indian reality. For example, it does not also adequately address how to cater to the global demand for Indian design in terms of teacher training, textbooks, a research database, and the development of other essential resources.

Currently, the Indian Government is in the process of establishing a Design Council of India (DCI) and a Chartered Society of Indian Designers (CSID). When that happens, it can bring phenomenal change to Indian design. Ahmedabad Declaration on Industrial Design for Development.

Ahmedabad Declaration on Industrial Design for Development

In April 1977 a Memorandum of Understanding was signed between UNIDO and ICSID to accelerate jointly industrial design activities in developing countries in order to satisfy urgent needs in this field, and to carry out as extensively as possible the promotional activities necessary to alert developing countries to the advantage of including industrial design in their planning process. It was to aid such awareness that a Meeting for the Promotion of Industrial Design in Developing Countries was convened by UNIDO in January 1979 in close cooperation with ICSID and the Indian National Institute of Design, in line with the Lima Declaration and Plan of Action and in pursuance of the Memorandum of Undertaking between UNIDO and ICSID. This Meeting was a significant milestone in the progress of the industrial design profession, marking the first design gathering ever to be held under the auspices of the United Nations. This meeting adopted the Ahmedabad Declaration on Industrial Design for Development which set forth a Plan of Action, and made Major Recommendations in support of this action plan.

A. Ahmedabad Declaration

1 The Meeting for the Promotion of Industrial Design in Developing Countries convened by the United Nations Industrial Development Organization (UNIDO) in close cooperation with the International Council of Societies of Industrial Design (ICSID) and the Indian National Institute of Design in January 1979, in line with the Lima Declaration and Plan of Action and in pursuance of the Memorandum of Understanding signed between UNIDO and ICSID on April 26, 1977, to accelerate jointly industrial design activities in developing countries in order to satisfy the urgent needs in this field, and to carry out as extensively as possible the promotional activities necessary to alert developing countries to the advantage of including industrial design in their planning processes,

Adopts

The Ahmedabad Declaration
on Industrial Design for
Development.

2. Having reviewed the situation with respect to industrial design in a number of developing countries,
3. Bearing in mind that design improves function, enhances communication, simplifies manufacture, use and maintenance,
4. Recognizing that the problem faced in most developing countries is that although design is a real need, it is not yet a sufficiently felt need,
5. Noting that design methodology is inadequately known and insufficiently used as an economic resource,
6. Aware that few countries have the organizational, financial and personnel resources which can enable industrial design to assume its proper role,
7. Convinced that design can help raise the quality of life within economic planning and that the designer can become an agent of progress,
8. Recognizing that through design, relevant cultural traditions can be preserved and utilized to current advantage,
9. Recognizing that cooperation between UNIDO and ICSID should not only further the transfer of technology, know-how and information in the field of industrial design, but should help to stimulate self-reliance,
10. Noting that UNIDO and ICSID have agreed to carry out as extensively as possible the promotional activities necessary to alert developing countries to the advantages of including industrial design in their planning processes,
11. Bearing in mind that as a first step towards achieving these objectives, this Meeting was convened to help initiate meaningful cooperation and exchange between institutions and designers concerned with problems of the developing world,
12. Having decided to adopt a common position and a line of action, the Meeting

Solemnly declares

13. Its firm conviction that design can be a powerful force for the improvement of the quality of life in the developing world;
14. Its firm belief that designers must have a clear understanding of the values of their own societies and of what constitutes a standard of life for their own people;
15. That design in the developing world must be committed to a search for local answers to local needs, utilizing indigenous skills,

materials and traditions while absorbing the extraordinary power that science and technology can make available to it;

16. That designers in every part of the world must work to evolve a new value system which dissolves the disastrous divisions between the worlds of waste and want, preserves the identity of peoples and attends the priority areas of need for the vast majority of mankind;

17. That in view of the foregoing, the Meeting adopts the various measures set forth in the following Plan of Action.

B. Plan of Action

Measures

1. Developing countries are encouraged to consider the establishment of design institutions, design centres and/or other design-practising and promotional institutions to spread design methodology, awareness and consciousness.

2. These institutions should develop close and sustained links with industrial activity in government and in the private sector, at every level including heavy industries, medium-scale industries, small-scale, rural and craft industries, as well as with educational and research institutions, and with people who are the ultimate users of design.

3. In developing countries, the establishment of professional design associations which can function parallel to the design promotional institutions should be seriously considered, and such efforts assisted.

4. Design institutions are worthy of financial and other support by their governments, which must be their prime source of succour at this early stage of development.

5. These institutions must work to establish a priority for industrial design through the creation of a national design consciousness. They must hasten the awareness that in all areas of public expenditure, the integration of design in the planning process can ensure optimum quality and utilisation of resources. They must communicate that industrial design is concerned with the improvement of our environment through the appropriate use of raw materials, increased productivity, with the protection of health, human safety, natural and cultural resources, with the enhancement of working environments, and with expanding work opportunities and earnings at all levels, including exports. Therefore design considerations should be incorporated in plans for national development.

6. To achieve these purposes, such institutions in developing countries may consider the importance of articulating a statement on the importance of design which can serve as a national

consensus on the need for creating design awareness and for utilizing design as a discipline for better planning.

7. Such institutions must stress the importance of establishing and improving facilities for design education and training, upgrading design experience, as well as assisting designers to act as trainers and as catalysts for design awareness wherever they work, so that design skills can be disseminated at several levels simultaneously, and thus influence industrial activity on a broad scale in the developing world.

8. The establishment of national design awards, exhibitions, documentation and publication programmes should be encouraged as aids to a wider understanding of industrial design and of design traditions and resources.

9. Systems of active cooperation should be established and promoted between design institutions in the developed and less developed countries, and between these institutions in the less developed world.

10. These cooperative arrangements could be bilateral as well as multilateral. International organizations including ICSID, UNIDO, UNESCO, UNCTAD, WHO, UNEP, IBRD, the Asian Development Bank and the African Development Bank, IADB and others should be encouraged to provide active support to such cooperative arrangements.

Major Recommendations for the Promotion of Industrial Design for Development

A. Recommendations for Design Policies

1. There is a definite need in many lands for an official statement of policy on industrial design which could provide a basis for a national understanding of this profession. Unless such a national consensus is achieved, it will be difficult for the industrial design movement to be quickly accepted and to move ahead with speed.

2. Each developing country would first need to establish its own design objectives before it can select or innovate design policies and programmes appropriate to its needs.

3. The actual needs and the priority interests of government and industry in developing countries should therefore be ascertained before launching industrial design programme in these countries, so as to ensure that this new profession is clearly linked to national priorities.

4. Designers in developing countries, facing the overwhelming needs of their societies, can avoid the danger of spreading their skills too thin by such careful linkages to priority needs.

5. Developing countries must develop their own indigenous capacity for design through emphasis on training, research, development and consultancy services.
6. Designers in developing countries should guard against thoughtless imitation of design from industrially advanced nations, but should rather take into account local needs, traditions, production and consumption patterns.
7. Developing countries should evolve an adequate technology and an infrastructure for industrial design which is simple, inexpensive, easy to maintain, labour intensive and compatible with basic socio-cultural patterns. It must allow popular participation, increase productivity and income, and assist in the distribution of income and power, as well as increase self-reliance.
8. Industrial design is involved with creating not only material but also spiritual values. While the loss of cultural identity and values can seldom be restored, a sweep towards a general culture within a shrinking world is obvious. The industrial designer can help to link a people's aesthetic with modernisation, and thus serve as a force for confidence and identity, both individual and collective.
9. Industrial designers must recognise the need for design solutions which are in harmony with the attitudes, cultures and needs prevalent in their social environments.
10. The search for local skills, local materials and local design know-how, all of which abound in traditional societies, must mark the beginning of any effort to root industrial design in the Third World.
11. Design in its quest for relevance can be a tool for the reduction of social inequalities.
12. Minor, inexpensive improvements in objects or implements of everyday use can have an impact far beyond what is apparent, and aid the process of sensitisation to design as a need.
13. The duration of formal design training in developing countries today is anywhere between two years and five years. Design institutions in developing countries and governments which support them must be encouraged to understand that design learning is a slow process, which extends through experience beyond any specific period of formal training.
14. The education system with industrial design centres should be geared to bring out job creators and not mere job fillers, resource generators and not mere resource users. The training of trainers must be the first priority for countries introducing industrial design to their economies.
15. Adequate funding for equipment and material to assist institutions for design service and training should be arranged through government sources.

16. Industrial design service centres may need to be semi-autonomous institutions in order to function with maximum effectiveness.
17. Industrial design service centres should have salary scales in keeping with those prevailing in industry, if they are to attract and hold the best design talents. Industry should pay for the services of such institutions, as free service tends to invite disrespect.
18. Practical experience from industry should be represented on the teaching faculty of design training institution, which should be identified in every way with industrial activity, and not only with universities. This will enable them to acquire a predominantly industrial culture, which is essential to their success rather than a strictly academic one.
19. Design libraries and reference material facilities must be strengthened, and regarded as absolutely basic to the promotion and use of industrial design.
20. Design publication programmes and research activities require strong emphasis to disseminate information and awareness.
21. Some developing countries may require a system of industrial design implemented through appropriate state level departments and central research and development organizations, which simultaneously act as centres for training designers.
22. There is a need for a national policy in many countries to assist the proper placement of the industrial designer in industry and in planning and/or development organizations.
23. Promotional strategies are particularly important for service to craft and small-scale industries which are often unable to afford their own full-time designers. These strategies will require constant innovation and understanding of the importance of appropriate design, and the application of marketing skills is basic to this exercise.
24. There is a need to understand that design improvement, particularly in the small-scale sector, is a gradual process. It has often to be conducted over several phases, and at intervals.
25. Industrial designers in many developing countries will need to ensure that the requirements of medium and large-scale industries are not overlooked in the effort to serve the widely dispersed design requirements of the small-scale sectors.
26. In some countries, design organizations specifically for export promotion should be considered.
27. In countries with rich craft traditions, the production of handicrafts and the thoughtful mastery of the experience of form accumulated through centuries should be utilized by the industrial designer as a prime resource, integrating the benefits of contemporary technology.

28. Cooperative arrangements for design collaboration should first commence between individuals and institutions within each country, and then extend to countries within a region.
29. The brain drain in design know-how should be prevented at all costs, and the exchange of experience and technical assistance on a regional basis can be a useful aid to building and preserving local expertise.
30. It is necessary to understand and to demonstrate that industrial design is a process, and not merely an end product.

B. Recommendations for Design Promotion

1. Industrial designers will need to demonstrate far more effectively the importance and economic advantages of good design to both industry and Government, particularly in developing countries, if the profession is to receive the priority which it deserves.
2. Promotional strategies are particularly important for service to craft and small-scale industries which are often unable to afford their own full-time designers. These strategies will require constant innovation and understanding of the importance of appropriate design, and the application of marketing skills is basic to this exercise.
3. Minor, inexpensive improvements in objects or implements of everyday use can have an impact far beyond what is apparent, and aid the process of sensitisation to design as a need.
4. The importance of adequate programmes and facilities for documentation and publication cannot be overstressed in the promotion of industrial design.
5. Design publication programmes and research activities require strong emphasis to disseminate information and awareness.
6. Each developing country should compile directories of design institutions and design-oriented organizations, to help contact and exchange. Scientific and technological institutions should be important elements in such an inventory.
7. Design methods must be propagated to people engaged in management and to consumers by organizing promotional activities with this aim in view, utilizing mass media.
8. Industrial design service centres should have salary scales in keeping with those prevailing in industry, if they are to attract and hold the best design talents. Industry should pay for the services of such institutions, as free service tends to invite disrespect.
9. Importance should be placed on adequate coordination between institutions of specialised research which impinge on design with the users of such specialised services and with industrial designers. An example of this need is the packaging industry.

10. Designers must be encouraged to understand that their profession requires them to function in close association with other disciplines, and therefore the concept of teamwork must be in-built to design strategies.

11. Cooperative arrangements for design collaboration should first commence between individuals and institutions within each country, and then extend to countries within a region.

12. Regional associations should be encouraged to facilitate design cooperation and to utilise facilities available among neighbouring countries.

13. ICSID's Inter-design workshop facility can be a useful means of promoting industrial design through the mechanism of intensive problem-solving sessions in major areas of design need, providing a catalyst for design awareness and demonstration.

C. Recommendations for Government Action

1. There is a definite need in many lands for an official statement of policy on industrial design which could provide a basis for a national understanding of this profession. Unless such a national consensus is achieved, it will be difficult for the industrial design movement to be quickly accepted and to move ahead with speed.

2. Designers in developing countries require strong and sustained links with industry and government at all levels. These linkages are required at the outset when design priorities are being investigated and stated and at all later stages so that design solutions are practical and their implementation and demonstration facilitated.

3. The actual needs and the priority interests of government and industry in developing countries should be ascertained before launching industrial design programme in these countries, so as to ensure that this new profession is clearly linked to national priorities.

4. Industrial designers will need to demonstrate far more effectively the importance of good design to both industry and Government, particularly in developing countries, if the profession is to receive the priority which it deserves.

5. Promotional strategies are particularly important for service to craft and small-scale industries which are often unable to afford their own full-time designers. These strategies will require constant innovation and understanding of the importance of appropriate design, and the application of marketing skills is basic to this exercise.

6. Stress should be placed on product design services to serve small industries which cannot afford their own designers. Such facilities could be attached to service centres equipped with designers and small workshop facilities.

7. There is a need for government to understand that design improvement, particularly in the small-scale sector, is a gradual process and often has to be conducted over several phases and at intervals.
8. Early assistance from governments is required to help to reduce the risk of investment in new technologies of design. Incentives for investment in industrial design should be comparable to incentives provided to other research and development activities.
9. To be effective, industrial design service centres may need to be semi-autonomous institutions.
10. Some developing countries may require a state system of industrial design implemented through appropriate state level departments and central research and development organizations, which simultaneously act as centres for training designers.
11. Adequate funding for staff, equipment and materials to assist design service and training institutions should be arranged through government sources.
12. The duration of formal design training in developing countries today is anywhere between two years and five years. Design institutions in developing countries and governments which support them must be encouraged to understand that design learning is a slow process, which extends through experience beyond any specific period of formal training.
13. Importance should be placed on adequate coordination between institutions of specialised research which impinge on design with the users of such specialised services and with industrial designers. An example of this need is the packaging industry.
14. There is a need for a national policy in many countries to assist the proper placement of the industrial designer in industry and in planning and/or development organizations.
15. The brain drain in design know-how should be prevented at all costs, and the exchange of experience and technical assistance on a regional basis can be a useful aid to building and preserving local expertise.
16. Design institutions in developing countries should check existing official agreements between their governments and international organizations, as well as bilateral agreements with other countries, so as to immediately utilise existing arrangements to promote international design exchange.
17. UNIDO facilities for technical cooperation between developing countries, as well as bilateral arrangements which exist between several countries, should be examined so as to facilitate the exchange of industrial design experience between developing countries.

D. Recommendations for Action by Industry

1. Industrial designers will need to demonstrate far more effectively the importance of good design to both industry and government, particularly in developing countries, if the profession is to receive the priority which it deserves.
2. Designers in developing countries require strong and sustained links with industry and Government at all levels. These linkages are required at the outset when design priorities are being investigated and stated and at all later stages so that design solutions are practical and their implementation and demonstration facilitated.
3. The actual needs and the priority interests of government and industry in developing countries should be ascertained before launching industrial design programme in these countries, so as to ensure that this profession is clearly linked to national priorities.
4. Systems for close contact and co-operation between designers and manufacturers are an essential prerequisite.
5. Developing countries should evolve an adequate technology and an infrastructure for industrial design which is simple, inexpensive, easy to maintain, labour-intensive and compatible with basic socio-cultural patterns. It must allow popular participation, increase productivity and income, and assist in the distribution of income and power as well as increase self-reliance.
6. The search for local skills, local materials and local design know-how all of which abound in traditional societies, must mark the beginning of any effort to root industrial design in the Third World.
7. Industrial designers need an adequate understanding of the production technology required to implement their solutions.
8. In countries with rich craft traditions, the production of handicrafts and the thoughtful mastery of the experience of form accumulated through centuries should be utilized by the industrial designer as a prime resource, integrating the benefits of contemporary technology.
9. Promotional strategies are particularly important for service to craft and small-scale industries which are often unable to afford their own full-time designers. These strategies will require constant innovation and understanding of the importance of appropriate design, and the application of marketing skills is basic to this exercise.
10. Product design services to small industries could be attached to service centres, with designers and small workshop facilities.
11. There is a need to understand that design improvement, particularly in the small-scale sector, is a gradual process. It has often to be conducted over several phases, and at intervals.

12. The geographical locations of industrial design service should be selected so that they are within easy reach of the industries they must serve.
13. Industrial design centres for small-scale industries should be established near industrial estate to facilitate extension services.
14. Industrial design service centres may need to be semi-autonomous institutions in order to function with maximum effectiveness.
15. Industrial design service centres should have salary scales in keeping with those prevailing in industry, if they are to attract and hold the best design talents. Industry should pay for the services of such institutions, as free service tends to invite disrespect.
16. Industrial designers in many developing countries will need to ensure that the requirements of medium and large scale industries are not overlooked in the effort to serve the widely dispersed design requirements of the small-scale sectors.
17. Industrial designers require sufficient exposure to tool design, technical processes and plant design so as to serve effectively on industrial teams.
18. Designers must be encouraged to understand that their profession requires them to function in close association with other disciplines, and therefore the concept of teamwork must be in-built to design strategies.
19. Design methods must be propagated to people engaged in management and to consumers by organizing promotional activities with this aim in view, utilizing mass media.
20. Industrial design should be based on defined product demand.
21. Industrial designers must serve entrepreneurs with technical information.
22. When developing their brief for consultancy services and in assisting their clients to develop accurate briefs, designers may need to consult people on the shop-floor and middle-management levels, in order to gather practical information essential to effective design solutions.
23. Importance should be placed on adequate coordination between institutions of specialised research which impinge on design with the users of such specialised services and with industrial designers. An example of this need is the packaging industry.
24. Stringent testing procedures should be applied to all design development and adequate facilities for testing established in industry and at design service centres.
25. The importance of packaging should be recognized by designers and design institutions as a major area of work in developing countries, including the development of packaging equipment.

26. The development of an intermediate technology for industrial design in developing countries is a priority.

27. There is a need for a national policy in many countries to assist the proper placement of the industrial designer in industry and in planning and/or development organizations.

28. In some countries, design organizations specifically for export promotion should be considered.

E. Information Requirements

1. The importance of adequate programmes and facilities for documentation and publication cannot be overstressed in the promotion of industrial design.

2. Design publication programmes and research activities require strong emphasis to disseminate information and awareness.

3. Design libraries and reference material facilities must be strengthened, and regarded as absolutely basic to the promotion and use of industrial design.

4. Permanent collections of every day objects must be organized by design centres as a primary study resource.

5. Each developing country should compile directories of design institutions and design-oriented organizations to help contact and exchange.

6. Industrial design should be based on defined product demand, and therefore will often require the support of market research and information services.

7. Industrial designers must serve entrepreneurs with technical information.

8. ICSID should activate its Data Bank proposals for the exchange of design information, as this would be a major aid for designers and design institutions in the Third World. The Data Bank can serve information needs on design institutions, appropriate technology, product designs, equipment, design standards, and education and training facilities.

9. The exchange of information between design training centres in various countries can assist in selecting and innovating training programmes relevant to each country's needs. UNESCO and UNIDO should be actively involved in this pursuit.

F. Recommendations for Education, Training and Extension in Industrial Design

1. Developing countries must develop their own indigenous capacity for design through emphasis on training, research, development and consultancy services.

2. Each developing country would first need to articulate its own design objectives before it can select or innovate training programmes appropriate to its needs.
3. Adequate funding for staff, equipment and materials to assist design institutions and design training should be arranged through government sources.
4. The importance of adequate programmes and facilities for documentation and publication cannot be overstressed in the promotion of industrial design.
5. Design libraries, sample collections, reference material facilities, and facilities for prototype making and testing must be strengthened. These are absolutely basic to the promotion and use of industrial design.
6. The search for local skills, local materials and local design know-how, all of which abound in traditional societies, must mark the beginning of any effort to root industrial design in the Third World.
7. Design publication programmes and research activities require strong emphasis to disseminate information and awareness.
8. Permanent collections of everyday objects must be organized by design centres as a prime resource for study.
9. Design training must be consciously inter-disciplinary, and designers must be trained to understand, and to draw from, other professional skills.
10. Designers must be encouraged to understand that their profession requires them to function in close association with other disciplines, and therefore the concept of teamwork must be in-built in design strategies.
11. Designs must be subjected to stringent tests, and the discipline of testing ingrained into design training programmes.
12. The education system with industrial design centres should be geared to bring out job creators and not mere job fillers, resource generators and not mere resource users. Design centres should stress developing people with skills rather than skills for people.
13. The duration of formal design training in developing countries today is anywhere between two years and five years. Design institutions in developing countries and governments which support them must be encouraged to understand that design learning is a slow process, which extends through experience beyond any specific period of formal training.
14. Industrial design training must take place at several levels simultaneously. These levels would include school-leavers, graduates, extension courses for professionals (such as engineers, architects, and craftsmen, artists etc.) and should reflect a multi-disciplinary approach. Special attention will need to be paid to

programmes of exposure in industrial design for the profession of engineering design.

15. Design training should be based on constant exposures to real-life problems, to make the problem-solving methodology of industrial design a reality during the learning process.

16. Teaching materials for design training need be drawn from actual industrial situations.

17. Practical experience from industry should be represented on the teaching faculty of such institutions, which should be identified in every way with industrial activity, and not with universities. This will enable them to acquire a predominantly industrial culture, which is essential to their success rather than a strictly academic one.

18. Industrial designers require sufficient exposure to too design, technical processes and plant design so as to serve effectively on industrial teams. Technical and engineering skills and awareness must be ingrained into design training.

19. Industrial designers need an adequate grounding in the production technologies required to implement their solutions.

20. Industrial design service centers should have salary scales in keeping with those prevailing in industry, if they are to attract and hold the best design talents. Industry should pay for the services of such institutions as free service tends to invite disrespect.

21. There is a general need to stress opportunities for design exposure and awareness in existing polytechnical institutions.

22. The importance of packaging should be recognized by designers and design institutions as a major area of work in developing countries.

23. In some countries existing training facilities need to be strengthened and innovative methods evolved, so as to spread design know-how and training at various levels of industrial activity and management. The important role of such extension activities require to be in-built with design training centres so as to ensure the spread of design skills and awareness.

24. Stress should be placed on product design training through extension services to small industries, which cannot afford their own designers. Such facilities could be attached to design service centres with designers and small workshop facilities. The geographical locations of such industrial design facilities for small industries should be selected so that they are within easy reach of the industries they must serve.

25. Some developing countries may require a state system of industrial design implemented through appropriate state level departments, and central research and development organizations which simultaneously act as centres for training designers.

26. The exchange of information between design training centres in various countries can assist this process of innovation. UNESCO and UNIDO should be actively involved in this pursuit.

27. Programmes for regular short-term training assistance to design institutions in developing countries may be considered.

28. The brain drain in design know-how should be prevented at all costs, and the exchange of experience and technical assistance on a regional basis can be a useful aid to building and preserving local expertise.

29. ICSID's Inter-design workshop facility can be a useful means of promoting industrial design through the mechanism of intensive problem-solving sessions in major areas of design need, providing a catalyst for design awareness and demonstration.

G. Recommendations for International Cooperation

1. Cooperative arrangements for design collaboration should first commence between individuals and institutions within each country, and then extend to countries within a region.

2. Regional associations should be encouraged to facilitate design cooperation and to utilise facilities available among neighbouring countries.

3. The brain drain in design know-how should be prevented at all costs, and the exchange of experience and technical assistance on a regional basis can be a useful aid to building and preserving local expertise.

4. Cooperative arrangements for design collaboration should be established between developing and developed countries, between developing countries themselves and/or in combinations of these under "twinning agreements" which are eligible for UNIDO assistance.

5. Design institutions in developing countries should check existing official agreements between their governments and international organizations, as well as bilateral agreements with other countries, so as to immediately utilise existing arrangements to promote international design exchange.

6. Programmes for regular short-term technical assistance to design training institutions in developing countries may be considered, through UNIDO channels.

7. UNIDO facilities for technical cooperation between developing countries, as well as bilateral arrangements which exist between several countries, should be examined so as to facilitate the exchange of industrial design experience between developing countries.

8. Industrial design service centres should be eligible for assistance through UNIDO, UNESCO, UNDP, ICSID and similar channels.

9. Requests for technical assistance from UNIDO should be routed through government channels. Local UNDP offices located in each developing country can assist design institutions with matters of procedure.

10. The exchange of informations between design training centres in various countries should be assisted through UNESCO and UNIDO.

11. An UNIDO/ICSID initiative for exchange of information on intermediate technology should be initiated.

12. ICSID should activate its Data Bank proposals for the exchange of design information, as this would be a major aid for designers and design institutions in the Third World.

13. ICSID's Inter-design workshop facility can be a useful means of promoting industrial design through the mechanism of intensive problem-solving sessions in major areas of design need, providing a catalyst for design awareness and demonstration.

14. ICSID membership fees should be adjusted to accommodate the financial limitations faced by design institutions in most developing countries.

15. ICSID should establish a panel specifically to deal with the problem of its membership in developing countries.