

# An Annual Report

Project Year 2: 08 June 2005 – 07 June 2006

## WHEELCHAIRS FOR MINDANAO PROJECT



A Joint Undertaking of

**HANDICAP  
INTERNATIONAL**  
*Vivre debout*

and



Submitted by:

**HANDICAP INTERNATIONAL**

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## ***I. Executive Summary***

The Wheelchairs for Mindanao project started to upscale its activities during its second year of implementation, specifically in the areas of production, sustainability as an enterprise and grassroots advocacy and social awareness activities conducted by its partner organizations.

Procurement of various machines and equipment resulted to faster and more efficient wheelchair production, which brought the number of **wheelchairs fabricated and distributed to a total of 170 units** at the end of the project's second year. Of this number, **120 were custom-made and 50 were sports wheelchairs (basketball and racing chairs), which included the units used by Team Philippines for training during the 3<sup>rd</sup> ASEAN ParaGames held in Manila in December 2005.** By being part of the said event, the project's wheelchair technology was introduced to the sporting world – so much so that the event's lead organizer, the Philippine Sports Association for the Differently Abled (PHILSPADA), decided to partner with Handicap International (HI) in providing sports wheelchairs of different models for exclusive use in the next Philippines National ParaGames competitions slated in February 2007.

At the beginning of Year II, the facilities to start the production were just completed. While most of the activities cannot be dissociated from each other, some priorities were made in order to ensure that strong focus was given to strategic components of the project. The general strategy for the first half of Year II was mainly to start a real production (versus prototyping), assess and reach our production potential capacities and put in place quality control procedures and mechanisms in the production process. The activities during the second half of the year were focused to fine-tuning wheelchair production and bringing it to a "professional level", which included production cost reduction, quality control improvement, product detailing, logistic and delivery system, and stock management.

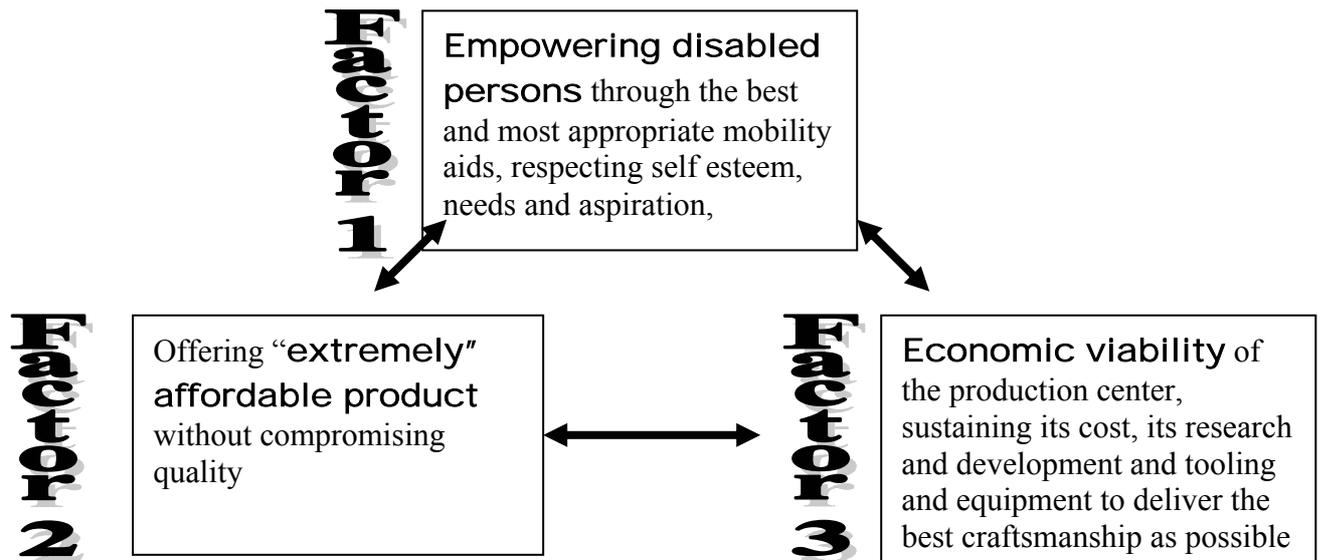
The technical skills of the production personnel have vastly improved especially as they were able to respond to new technological innovations and current market demands in tune with international manufacturers. New and innovative designs introduced by the Production Team are incorporated in the final designs especially to highly customized wheelchairs. A new strategic phase of production is underway, which is to deliver "globally competitive products". With the hiring of a business development officer, the production is experiencing a serious shift towards becoming a full-pledged social business enterprise.

Meanwhile, the five (5) distribution units continued doing the **identification and assessment** of about **550 persons with disabilities (PWDs)**, validating who are in need of wheelchairs, taking the right measurement and providing related services such as **counseling and education regarding disability concerns; prevention of secondary disability and other intervention scheme which will maximize the limited functional capability of a PWD.**

## ***II. Introduction***

Before detailing the activities that were carried out, it is important to note the context of and the principles that guided project implementation during Year II.

Indeed, three major factors/considerations influenced this process: 1) our goal of empowering disabled persons; 2) the socio-economic constraints in making "extremely" affordable products; and 3) the economic viability of the production center.



While the paradigm remains, it was found out that the issues cannot be handled separately; rather, any step made should not be done in any direction if it is contradictory to one or any of the factors specified above.

To respond to the challenge, it was decided that the project shall adopt an “enterprise approach” rather than a “charitable approach”, in which some common words from the Non Government Organization Sector have to be translated and reflected in the way of operation. Major changes were essentially shifting from:

- “Beneficiaries needs fulfillment” to “customer satisfaction”,
- “Low cost appropriate technology” to “competitive product”
- “Livelihood” to “professional manufacturer”

A strong mindset in the “enterprise approach” was to develop an “enterprise culture” within the production center and instilling a sense of identity and pride among the team, with emphasis on, or under the context of, the project objectives, vision and mission.

As mentioned, the production process has evolved from just producing wheelchairs for the sake of production to making each unit a “globally competitive product” designed to empower its user. Viability and sustainability of the project, especially as a social business enterprise, would not be that difficult to achieve if all of the above-mentioned factors will be taken into serious consideration, whether in a daily routine job or a strategic decision.

### The three main steps in the production strategy of Year II



### ***III. Project Components***

#### **Production**

The production level is now capable of fabricating at least 60 wheelchairs per month and has an on-stock inventory of raw materials good for at least 100 wheelchairs. While sourcing of new materials is still being developed, other regular items of raw materials have now a steady and regular supplier that can easily supply our current and immediate material requirements.

Production tools and equipments are now mostly in place. Procurement of additional tools and equipments is already planned to augment current capacity and attain maximum efficiency.

While every effort is exerted during the production process to ensure high quality of and workmanship in the wheelchairs, possible defects will still surface after several months of use especially considering the hard terrain the wheelchairs have to face. Instead of implementing costly field monitoring, it was decided instead to shift from “a paternalizing approach” to a “rights-based approach”. A warranty system has been developed to emphasize product quality of each component and the wheelchair as a whole. This system is based on the belief that the burden of a broken wheelchair should not be on the person but on the manufacturer and that having a wheelchair fixed is a right rather than a hypothetical chance.

In order to make the system work and to be user-friendly, a warranty and product help hotline has also been put in place. The system has been set up to entertain user feedback, queries, suggestions and even complaints. The following media are the hotline: voice and SMS: +63 918 559 774, email: [free.technology@gmail.com](mailto:free.technology@gmail.com). A trained customer service staff based in the Production Center will handle all these and will forward immediately to the concerned personnel - from the Project Manager, Consultant and to the Production Team, any warranty claim for immediate and appropriate action. A specific card with all the warranty instructions is given to the user upon delivery of the unit.

#### ***Technological Advancement***

Year II of the project proved very auspicious as far as technological advancement is concerned as the production team was able to develop several highly customized wheelchairs such as one-hand drive wheelchair (two units), sports extreme wheelchairs (SEW) models, and trikes. A number of prototype models, including hand cycle, power chair, are also in the concept and product development stages to cater to other mobility needs of its target clients.

A Production Team Leader was appointed from the current pool to supervise daily technical and production activities including the monitoring of skills development and skills upgrading.

#### ***Color and Canvass Options***

Considering the amount of time people spend on their wheelchairs, and with due respect to the rights of people with disability to make choices in what concerns them, the project's customization approach was adapted in such a way that the wheelchairs should not only respond to the pathological needs of the users but equally to their “aspiration needs” by giving them the capacity to make choices – to “customize” – according to their “taste and identity”.

Moreover, as the powder coating facility is now fully operational, production is now able to offer wheelchair colors in six (6) different tones: blue, black, red, white, green and yellow. Other custom colors are being studied and tested for possible adaptation to our wheelchairs in the near future.

Canvas materials are now also varied to suit client's clinical needs and even individuality. Black and blue canvas are standard issues while custom fabric are offered as options.

### **Social Business Enterprise**

HI and its project partners met thrice during the period to discuss the sustainability component – Business Enterprise. The business plan development is already underway and looked very promising as it was able to identify several potential business opportunities and strategies that are highly doable and viable for the business. Among these is to develop the cerebral palsy (CP) market which offers a promising statistical business opportunity with at least 4,000 CP cases in the Philippines annually. Conservatively, the project is looking at least 300 CP wheelchair sales annually with an average annual sales of 500 CP WCs thereafter.

Another sound and highly doable strategy is to tap professional and commercial distribution outlets particularly in highly urban centers of Metro Manila and Metro Cebu. A number of potential distribution outlets have signified their serious intention to distribute our wheelchairs especially after learning that our wheelchairs are technologically and aesthetically competitive even against imported models while making it very affordable especially to the Philippine market.

Each Distribution Center is staffed by professional rehab practitioners trained and equipped to handle any kind of disability that requires wheelchair use for rehab and recuperation. These professionals will also handle social marketing of wheelchairs.

Part of the business strategy is to package our wheelchairs and our marketing activities and collaterals in a highly professional manner. Thus, we adopted "**FREEDOM TECHNOLOGY**" as brand name for the Wheelchair products and "**FreedomTech, Inc.**" as the business name of the planned business enterprise. To give the brand name an identity, Freedom Technology has already adopted a logo, the design of which appears below:



The catalogue development is also underway as it will feature wheelchair and mobility product that will have a strong marketability potential.

## Other Project Components

Other various issues and concerns, such as social awareness and advocacy issues, school integration, livelihood and micro-finance opportunities including the identification of different terms currently used in reference to disability issues. A **common set of terminologies** were identified to be used consistently especially for project-related issues for better and efficient communication and coordination among partners and stakeholders.

Another major highlight for the period is the inclusion of **Gender and Children issues** to the project **by incorporating in its activities gender sensitivity issues and for a on the proper care of children especially those with disabilities, including the provision of appropriate mobility devices to women and children.** The highlight of this particular project activity is the provision of customized wheelchairs to 1) Gaspar Salim, a 12-year old Grade 5 student w/ congenital disability from Zamboanga City and to 2) Michelle Aplador, a 21-year old lass from Masbate who was born without her left arm and two legs. Their respective families, relatives and peers were also given formal orientation on the proper care of children and women with disability.

Moreover, the **buildings of the two distribution units – Loving Presence Foundation in San Francisco, Agusan Sur and Living Witness Foundation of Zamboanga City,** have **completed their construction** and since have been utilizing their respective facilities for rehabilitation activities, including wheelchair distribution.

The project also sent a team to **St. Bernard, So. Leyte,** to **identify and determine possible interventions,** such as psycho-social counseling and rehabilitation activities, for the victims of the recent mudslide tragedy.

### Other important highlights:

- Conduct of Wheelchair Day Events Through the Various Partners/Distribution Units: Davao Jubilee Foundation, December 2005; Loving Presence Foundation, Bislig City, December 2005); Philippine Service of Mercy Foundation, Cagayan de Oro City, December 2005 and HI-Cotabato, Cotabato City, December 2005.
- Partners' Meeting was conducted three (3) times (Cagayan De Oro, Zamboanga and Davao City) to discuss project related concerns, administrative and finance procedures and project activities.
- Construction and Completion of the two (2) Distribution Units in Caraga Region and Zamboanga City.
- Purchase of additional tools and equipments for Loving Presence, Caraga and Living Witness, Zamboanga.

- Ongoing Business Plan Development and networking with various different institutions and agencies in the allied industry for future business expansion.
- Hiring and training of a Finance/Business Development Officer for the Business Plan Development and the establishment of the planned Business Enterprise.
- Exploratory round table discussions with stakeholders for the planned 1<sup>st</sup> Mindanao Wheelchair Congress. This activity will be spearheaded by the partners and will be organized in partnership with leading institutions and agencies for the PWD sector.
- Exploratory roundtable discussion with officers from the Business Support Unit of the GEM program for possible collaboration of the two USAID-funded projects. (i.e., GEM to promote to their business and partner network the WFM and its wheelchair products; WFM and HI to promote to its network GEM's Business Support project.)

## IV. WHEELCHAIR PRODUCTION SUMMARY

### WHEELCHAIR DISTRIBUTION SUMMARY PERIOD COVERED: JUNE 2005 - MAY 2006

MONT H	WHEELCHAIR TYPE	DISTRIBUTION UNIT							SUB TOTAL	TOT AL
		DAVAO	CARAGA	ZAMBO	CDO	COT	HILWAI	OTHERS		MONT HLY TOTA L
Jul-05	STANDARD	1	2	0	1	1	0	0	5	5
									0	
Aug-05	STANDARD	0	0	0	0	0	5	0	5	5
									0	
Sep-05	STANDARD	2	8	0	0	7	0	1	18	18
									0	
Nov-05	STANDARD							1	1	10
	SPORTS: RACING	0	0	0	0	0	0	8	8	
	BASKETBALL							1	1	
Dec-05	STANDARD	1	7	2	2	0	8	0	20	23
	SPORTS: BASKETBALL	3	0	0	0	0	0	0	3	
Jan-06	STANDARD	1	0	0	4	6	0	3	14	14
	SPORTS: BASKETBALL	0	0	0	0	0	0	0	0	
Feb-06	STANDARD	0	0	9	2	0	0	0	11	21
	SPORTS: BASKETBALL	0	0	10	0	0	0	0	10	
Mar-06	STANDARD	3	7	0	16	6	4	4	40	43
	SPORTS: BASKETBALL	2	0	0	0	0	0	0	2	
	HANDCYCLE (PROTOTYPE)	0	0	0	0	0	0	1	1	
May-06	STANDARD	0	3	0	2	3	0	12	20	31
	SPORTS: BASKETBALL	0	0	0	0	0	0	10	10	
	HANDCYCLE VARIANT MODEL(PROTOTYPE)	0	0	0	0	0	0	1	1	
	STANDARD	8	27	11	27	23	17	21	134	
	SPORTS:									
	BASKETBALL	5	0	10	0	0	0	11	26	
	RACING	0	0	0	0	0	0	8	8	
	PROTOTYPE WCs	0	0	0	0	0	0	2	2	
	<b>GRAND TOTAL</b>	<b>13</b>	<b>27</b>	<b>21</b>	<b>27</b>	<b>23</b>	<b>17</b>	<b>42</b>		<b>170</b>

## V. Specific Accomplishments: Targets vs. Results

ACTIVITIES	TARGET OUTPUT	ACCOMPLISHMENT	REMARKS
Establish Additional Two (2) Distribution Units in the Areas/Cities in Mindanao	Distribution Units in Caraga Region and Western Mindanao area Established & Rehabilitation Facilities constructed.	Two (2) Distribution Units building in San Francisco, Agusan Sur and Zamboanga City were Constructed & Established	Directly Taking Charge of the Distribution Units: Caraga Region: Loving Presence Foundation Western Mindanao: Living Witness Foundation
Pooling, Recruitment & Hiring of Additional Personnel for the Project	Staff for the Project were Recruited and Hired  <b>A.) Production Center</b>  ➤ (1) Finance and Business Development Officer  <b>B. Distribution Units (2)</b>  ➤ 2 Physical Therapists ➤ 2 Social Workers ➤ 2 Wheelchair Technicians	<b>A. Production Center</b>  (1) Finance/Business Officer hired and trained  <b>B. Distribution Units (3)</b>  A total of <b>6</b> personnel were hired composed of Physical Therapist, Social Worker & Technician for San Francisco, Agusan del Sur and Zamboanga City  Two (2) administrative support staff were also hired to provide the needed admin. & logistical support	1 Physical Therapist , 1 Social Worker, 1 Technician and 1 Admin/finance staff for every Distribution Unit
ACTIVITIES	TARGET OUTPUT	ACCOMPLISHMENT	REMARKS
Produce or Fabricate Prescribed Wheelchairs	Batches of Prescribed Wheelchairs Fabricated or Produced & Delivered to the Various Distribution Units	170 Wheelchairs fabricated and distributed to the distribution units	Wheelchairs distributed in Visayas region through the HI HILWAI facility. One (1) unit was sent to the US for material testing and successfully passed the test.

<p>Coordinate With Partners &amp; Facilitate the Day-To-Day Activities of the Project</p>	<p>Other Minor &amp; Major Activities that Equally Concern the Project were Facilitated and/or Implemented.</p>	<p>► Wheelchair Day Events Conducted in various cities through out Mindanao</p>	<p>Through the Partners, the Wheelchairs Day Event was conducted in Four (4) Different places in Mindanao and was well participated by NGOs, local government units &amp; organizations of persons with disabilities &amp; wheelchair users</p>
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## ***VI. ISSUES AND CONCERNS***

The following issues and concerns have been encountered throughout the period:

### **Production:**

1. The availability and sourcing of some raw materials and bike components are either: a) not readily available in Cagayan de Oro (CDO) City or b) expensive than the projected cost. This is because some materials and components are scarcely in demand so local suppliers do not have on stock that can serve our requirements.
2. Commercial powder coating cost is very expensive and the finished product is below our QC level. Only 1 supplier in CDO offers powder coating service that is why cost and quality are totally dependent and dictated by the supplier. Similar case is also experienced in sourcing the front caster wheels. While the product QC passed our criteria, its cost is still very high being the lone supplier in CDO.
3. Serious cost reduction in production can only be achieved by increasing the volume of production and therefore the volume of distribution.

### **Clinical Coordination among Physiotherapists and Wheelchair Production Center:**

A major issue that emerged during this period is the clinical coordination among physiotherapists (PT)/occupational therapist (OT) especially in the correct assessment of clients and efficient ordering of wheelchairs to the wheelchair production center. While this is part of the consultative task of the Wheelchair (WC) Consultant; actual monitoring, coordination and administrative responsibility is lacking because of the absence of the PT/OT Clinical Service Staff. The current setup cannot address the need to have a PT Clinical Coordinator as the WC is tied with new designs and QC issues. The current lack of PT/OT clinical service compromise also our training capacity for the development of new distribution Units and the jeopardize the sustainability of the high level training such as pressure sore and special seating.

## **VII. LESSONS LEARNED AND ADJUSTMENTS MADE**

Over all, there is tremendous and significant progress that the project attained during the period. Most, if not all, items projected in the work plan for Year II were either excellently accomplished or already underway and working in progress.

A notable accomplishment is the technological advancement of the wheelchairs produced such that the project was able to partner immediately with a national sports organization – the PHILSPADA, and afforded our wheelchairs much needed exposure when we distributed sports models to the national training pool.

Another major breakthrough is the development of the business plan and the planned expansion of its distribution network by opening up new distribution outlets in major urban centers.

Despite of some issues and concerns encountered during the period the following adjustments were initiated to address each specific item:

### **1. Production**

- The scarcity of supplies from local suppliers and or the limited choice of potential local suppliers have been addressed when the project started to source these materials directly from manufacturers and/or direct importers based in Manila. Not only that the project was able to expand its supplier base but it was also able to bring down substantially its production cost because of the lower price offer of these manufacturers and direct importers.
- The in house powder coating facility was up and operational thereby allowing us to bring down cost of powder coating and likewise ensuring the quality of the finished products as well. This facility also enabled production to be very flexible in color options; six (6) color tones are now available for powder coating.
- Scouting for potential supplier of rubber front caster wheels is ongoing (possibly directly from Manila)

### **2. Physiotherapist Clinical Coordinator**

- Hiring of a Physiotherapist or Occupational Therapist is in process to train the rehabilitation service staff and coordinate rehab activities in the distribution units. This candidate should ideally have experience in using technology for seating (for example cushions for pressure-sore prevention, postural supports for increasing the function of clients with Cerebral Palsy).
- This position will also be tasked to develop the clinical curriculum for the project, in particular and for the Philippine market, general.

## V. Photos and Annexes

### A. WHEELCHAIR MODELS



Basketball Wheelchair, Streetball Model



Racing Wheelchair

Actual Sports Wheelchairs used by TEAM PHILIPPINES during the  
3<sup>rd</sup> ASEAN Para Games, December 2005 Manila



Off-road model



One-hand wheelchair



Trike model



Wheelchairs able to navigate even through rough roads

## B. PRODUCTION CENTER ACTIVITIES



The Powder Coating Facility, now fully operational.



Able-bodied and disabled Wheelchair Technicians in action.

## C. WHEELCHAIR RECIPIENTS



Michelle Aplador, 21 years old from Masbate on her new wheelchair.



Gaspar Salim and Ben Gobin on ABS-CBN Zamboanga during the launching of Living Witness as a Distribution Unit for Zamboanga.



Skilled wheelchair riders teach other riders how to do a "wheelie", an extremely important advanced wheelchair skill which allows the rider to cross very difficult obstacles or patches of terrain

## C. PROJECT ACTIVITIES



Forum on Gender and Children's issues among PWD organizations organized and conducted by a partner DU - PSMF, Cagayan de Oro.



Launching of Living Witness Foundation as a Distribution Unit for Western Mindanao attended by Ben Gobin, Bishop Antonio Ledesma Mayor Celso Lobregat and some DSWD Officials.