Report on ICRC technical orthopaedic programme for war disabled

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Introduction

In 1994, the International Committee of the Red Cross (ICRC) had been engaged in sixteen countries on behalf of war amputees and other disabled. Among these countries, three new programmes have started in Iraq, Georgia and Azerbaijan. Whereas the programme of Colombia has been completed at the end of the year and handed over to the ICRC counterpart.

During the year, 14,986 prostheses and orthoses have been manufactured for 10,221 disabled. A large majority of these disabled have been injured by mines.

ICRC orthopaedic programmes as at December 1994

COLOMBIA: Santa Fé de Bogotá Beginning of the programme: 1992

After almost three years of collaboration with foundation CIREC (Cirurgia Reconstructiva), the management of the fabrication of local components has been handed over to our counterpart at the end of December 1994. After the establishment of locally made components during the first year introducing the use of polypropylene (PP) in lower limb prostheses, the second phase of the programme during 1993 has seen the development of this technology. Improving the component production, quality and quantity, giving short training courses, increasing the number of amputees fitted with the polypropylene prostheses, preparing technical handing over together with the promotion of this technology in Latin America, were the principal activities in 1994.

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A technical development started at the end of 1993 has been continued throughout this year by the use of a machine to inject the polypropylene and the fabrication of aluminium moulds in the workshop. This technique has been used for more than one year and has proved to be efficient regarding productivity (quantity, quality and ease of training). More low cost moulds made of epoxy resin or aluminium were and are still fabricated in order to raise the standard of all parts necessary in the fabrication of prostheses.

An important improvement in the appearance of the prostheses has been the use of coloured polypropylene sheets since July. The white colour of the prostheses provoked much criticism and complaints. The components are injected with the waste of these sheets after being ground up in a specialised workshop at a very low cost: 100 pesos per kilo (820 pesos = 1 US Dollar). The purchase of a more sophisticated injecting machine together with a grinder mill is foreseen by CIREC in 1995.

In order to promote the technology used in CIREC. the Regional Committee Rehabilitation in Medellin and the workshop of Managua were visited. A short training course (7-18 February 1994) was run for two technicians, one from CALI and the other from the San Juan de Dios Hospital, Bogota. During the courses organised by CIREC in Bogota (6-9 September 1994) and by ISPO in Panama (14-18 November 1994), several lectures on the polypropylene technology for lower limb prostheses were given. An illustrated catalogue of the polypropylene components has been widely distributed during ISPO meetings. A visit of CIREC by doctors and an administrator from the Social Security was organised (25 October 1994) after two previous meetings in

order to gain acceptance of the technology by this administration.

In 1994, 1,014 prostheses and orthoses have been manufactured. Twenty local workers and one ICRC expatriate are working in this programme.

SUDAN: Khartoum

Beginning of the action: 1990

This programme is led in collaboration with two partners, the Ministry of Social Planning (MOSP) and the Ministry of Defence (MOD).

The main objectives defined in 1993 were: to pursue collaboration with the local partners, to involve further the local authorities in their responsibilities and organise the administration of the centre, to motivate the local staff through organised training courses and incentives in order to improve the quality and efficiency of the orthopaedic activities, to develop thermoplastic techniques in prosthetics, to prepare the next project agreement, and to participate in the maintenance of the orthopaedic centre.

Not all the objectives have been achieved. The development of the new PP foot and the training programme are to be completed in 1995. These two goals were decided during the last semester of 1994. In April, the technical director, Mr. Tayeb Babiker, and the leader technician, Mr. H. Kamis of the component workshop, attended a three-week technical course at the Addis Ababa orthopaedic centre.

During this course they were introduced to the current ICRC techniques in thermoplastics and methods of recycling PP scrap. Devices for the knee-joint and tools were made for the NACPO (National Centre for Prosthetics and Orthotics) of Khartoum.

At the Centre, a short term course of six months was set up and started on 15 October 1994. The programme is designed to upgrade twelve orthopaedic technicians who have been working in the centre for at least three years. One assistant technician was included to participate in the course. Two others were selected from the orthotics and component sections. From the twelve selected, six are military (MOD) and six are civilians (MOSP). At the termination of the six month course, a Certificate of Professional Competence will be granted under the supervision of the Sudanese Association of Orthopaedic Surgeons of Khartoum and the ICRC. There are 84

employees at the Centre from the MOSP (48) and the MOD (37).

KENYA: Lokichoggio at the Sudanese border Beginning of the programme: 1992

The Lokichoggio orthopaedic workshop is attached to the ICRC surgical hospital on behalf of war amputees from South Sudan. It is organised from the ICRC delegation in Khartoum. Nine employees are working in the Centre. One of them is a qualified Kenyan prosthetist trained in Tanzania at the German Cooperation Training Centre of Moshi. One ICRC expatriate supervises the activities. Some 1,014 prostheses have been manufactured during the year in Khartoum and Lokichoggio for the Sudanese amputees.

MOZAMBIQUE: Maputo, Beira, Quelimanc, Nampula

Beginning of the programme: 1981

After 14 years of activities, the programme is now technically completed. During this period 7,600 prostheses have been manufactured; 23 Mozambican prosthetists have obtained in 1993 a Diploma in Prosthetics Category II according to ISPO (International Society for Prosthetics and Orthotics) levels; and polypropylene technology has been mastered.

In 1994, efforts have been made to find ways of ensuring the financial management of the programme, after the ICRC withdrawal, foreseen for 1995. Two possibilities have been considered: find another organisation to replace ICRC, or hand over the programme to its partner, the Ministry of Health, which could receive funds from outside sources.

There are 85 employees in the four centres and one ICRC prosthetist.

ETHIOPIA: Addis Ababa (POC), Debre Zeit,

Beginning of the action: 1979 in Debre Zeit, 1990 at the Prosthetic-Orthotic Centre (POC) and 1992 at Mekelle

In Ethiopia, the programme is considered to be technically completed. The Ethiopian personnel are well trained and the polypropylene technology has been implemented with good results.

Apart from the production of prostheses, the ICRC has been engaged during this period in the process of self-financing of the programmes

in order to anticipate its withdrawal in 1995. At the POC, a special grant has been created with donations from different sponsors to ensure provision of prostheses for destitute patients. The POC has also started to export orthopaedic components to other countries such as Angola, Somalia, Kenya and Eritrea.

The management of the orthopaedic workshop of Mekelle has been handed over to the authorities of Tigray.

the authorities of Tigray.

The Debre Zeit Rehabilitation Centre continues its activities under Ethiopian management with monthly technical visits from the ICRC. The Centre receives payment for orthopaedic appliances delivered to ex-army and army personnel.

The three Centres employ 96 workers and three ICRC prosthetists. The Centres have manufactured 1,257 prostheses and orthoses.

ERITREA: Asmara

The ICRC implemented an orthopaedic programme in Asmara from 1982 to 1985 and restarted in 1992

Our partner, the Social Affairs Authority, received a new director. This improved the management of the Centre and the co-operation in general.

Regarding local staff, eight prosthetists received sponsorship form WHO to attend different upgrading courses in Tanzania (3 years and 1 year). Another course started in Keren with a German NGO, "Johaniter Unfall Hilfe". Nine workers from Asmara attended this course which was divided in three periods of 4 weeks during the year.

Some 34 workers are employed in the Centre and the ICRC maintains one prosthetist.

During the year 583 prostheses and orthoses have been manufactured.

IRAQ: Baghdad, Basrah, Najef

This action started in 1994 according to an agreement of co-operation between the Ministry of Health (MoH) and ICRC.

During 1994 two buildings belonging to the MoH were renovated by the ICRC, one in Basrah and one in Najef. In late 1994, the ICRC opened a polypropylene component workshop in Baghdad.

To improve the qualification of the Iraqi prosthetists, a series of short-term upgrading coursed on lower limb prosthetics and orthotics was run by the ICRC over a period of three months. This action is motivated by a large number of amputees, civilian and military. The rehabilitation services of the country were considerably affected during the last two conflicts and consequently, could not cope with the needs. In addition, the international embargo contributed to reduce their effectiveness.

In 1994, the ICRC concentrated its efforts on the renovation of rehabilitation structures. The production of prostheses for the amputees will start in 1995. Two ICRC prosthetists are involved in this programme.

LEBANON: Sidon, Beit-Chebab Beginning of the programme: 1983

After 3 years of relative independence, it was decided in 1992 to assign an expatriate prosthetist to the programme to introduce the use of polypropylene in the fabrication of prostheses and orthopaedic components, and to organise a theoretical training programme for the prosthetists of both workshops.

During the year, the following objectives have been achieved:

- Replacement of all imported orthopaedic components by ICRC supplied components in polypropylene made in aluminium moulds supplied from Geneva.
- Fabrication of the sockets of prostheses in polypropylene.
- Training periods in Ethiopia for the heads of both workshops.
- Implementation of an eight month training programme in arabic for eight workers from both workshops.
- Organisation of a six week practical training for 24 students of the American University of Beirut sponsored by the World Rehabilitation Fund.
- Organisation of a six week training in fabrication of small orthoses for 12 physiotherapists and occupational therapists from "Terre des Hommes".
- Participation of the ICRC in the establishment of a price list of Ministry of Health for the different orthopaedic appliances in order to provide the Lebanese workshops with reimbursement from the Social Security.

The final examination following the training will be organised at the beginning of 1995. In 1994 both workshops manufactured 685 prostheses and orthoses. Eighteen employees

are working in Sidon and Beit-Chebab under the supervision of one ICRC prosthetist based in Damascus.

SYRIA: Damascus

This project was implemented between 1983 and 1986 on behalf of Palestinian amputees by the Swedish Red Cross with the technical participation of the ICRC.

From 1986 until 1992, the project was run by the Palestinian Red Crescent and followed technically by the ICRC through regular visits from Lebanon and the headquarters whereas the Swedish Red Cross continued to finance the material.

As in Lebanon, the ICRC prosthetist based in Damascus since 1993, had the task of developing the use of polypropylene and organising a theoretical training programme for the Palestinian prosthetists.

During 1994, the following objectives have been achieved:

- Construction of a new orthopaedic workshop in Yarmouk, a Palestinian district of Damascus. This workshop is attached to a Palestinian surgical hospital and benefited form a financial contribution of the Swedish Red Cross.
- Installation of equipment and machinery in this new workshop.
- Setting up of a fabrication unit of polypropylene orthopaedic components: knee-joints, feet, alignment systems etc.
- Introduction of polypropylene in the fabrication of the sockets of the prostheses.
- Organisation of an eight month training programme for 7 prosthetists from the workshop. The final examination is planned for the beginning of 1995.

There are eleven employees in the Centre and one ICRC prosthetist who shares his time with Lebanon. In 1994, 252 prostheses and orthoses were manufactured for Palestinian and Syrian amputees, civilians and military.

AFGHANISTAN: Kabul, Herat, Mazar-I-Shariff Beginning of the programme: 1987 in Kabul

Throughout the year, heavy fighting affected the orthopaedic activities in Kabul. The ICRC Orthopaedic Centre of Ali Abad, built in 1991, was hit by rockets and occupied by armed forces. Although attempts were made to reactivate it during interruptions in the fighting,

a decision was taken to set up another temporary workshop in the premises of the Wazir Akbar Khan hospital to manufacture orthopaedic components and prostheses. As a matter of fact, the number of amputees is bigger than ever. To meet the needs, a monthly production of 250 should be reached. Only 204 prostheses have been manufactured during the year.

Herat and Mazar-I-Shariff have fortunately not suffered form conflicts and have consequently satisfied a large number of amputees and disabled. In 1994, both workshops manufactured 1508 prostheses and orthoses. In August, a decision was taken to open a new orthopaedic workshop in the hospital of Jalalabad. At the end of the year the construction was completed. Production of prostheses is expected to start at the beginning of 1995.

There are 124 Afghan employees in the three workshops working with three prosthetists and one physiotherapist from ICRC.

PAKISTAN: Paraplegic Centre of Peshawar Beginning of the action: 1982

The Paraplegic Centre was built in 1982 on behalf of Afghan and Pakistani paraplegics. It has been run since then by the Pakistani Red Crescent in collaboration with the ICRC. In 1994, the financial participation of the ICRC has been reduced and consequently the number of admissions.

The main problem remains in finding local or external funds to maintain the services open to paraplegics and the quality of care. During 1994, 248 paraplegics have been admitted to the Centre. Some 169 orthoses and 206 wheelchairs have been manufactured, and 87 surgical operations were performed at the hospital. Ninety employees are working at the Centre in collaboration with an ICRC doctor specialised in paraplegia.

CAMBODIA: Phnom Penh, Battambang Beginning of the programme: 1991

The ICRC began its orthopaedic programme in the Kingdom of Cambodia in May 1991. At this time, there were two organisations in the country, HI and AFSC, providing prostheses to amputees who were victims of anti-personnel mines. Several meetings took place concerning the development and use of a common

technology that was appropriate for the country and the geographic location of workshops. In September 1991, the ICRC took over the HI workshop in Battambang. In October 1991, ICRC, HI and AFSC signed a letter of understanding. At the same time, a five year agreement was signed between the ICRC and the Ministry of Social Affairs, Labour and Veterans Affairs.

Simultaneously, the ICRC began to produce prostheses in the Battambang Orthopaedic Centre and to make components for the prostheses in the production unit for orthopaedic components in Phnom Penh.

October 1991 also marked the beginning of the construction of a new orthopaedic centre in Battambang. The centre became operational in September 1992. In February 1993 the physiotherapy building complex was inaugurated. Two dormitories with 120 beds were inaugurated in June of the same year. One year later, in June 1994 the new production unit for orthopaedic components in Phnom Penh opened its doors. These buildings were financed by the Swiss Disaster Relief Unit (SDRU).

The estimated number of amputees in the Kingdom of Cambodia in comparison with other countries is difficult as there are no completely reliable statistical data. The following figures are based on partial information, hypothesis and extrapolation:

Cambodia 1/236 to 425 habitants

Angola 1/470 Vietnam 1/1,250 Mozambique 1/1,862

USA 1/2,200 (trauma only)

Some sources suggest up to 60,000 amputees in the country and 600 new amputations per month caused by anti-personnel mines. We believe these numbers are exaggerated. The figures we provide are based on numerous evaluations completed by different NGOs and International Organisations. We believe there are around 20,000 amputees in the country and around 100 new amputations per month. This would indicate that around 25% of victims of mine accidents are Cambodians.

Between October 1991 and March 1995 the ICRC fitted 3,380 amputees and made 4,947 prostheses:

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|-------------|---------------|
| 71% | trans-tibial |
| 26% | trans-femoral |
| 3% | upper limb |

| 6% | women and children |
|------|---------------------------------|
| 0.5% | less than 10 years old |
| 80% | men between 18 and 40 |
| 95% | victims of anti-personnel mines |

Cost

The figures below include basic material, local employees' salaries, maintenance for the building and machines, and electricity:

trans-tibial prosthesis US\$ 53.trans-femoral prosthesis US\$ 60.-

arm prosthesis US\$ 49.- (with hook US\$ 75.-)

All prostheses, orthoses, shoes, stump socks, crutches, walkers, wheelchairs etc. are distributed free of charge to the beneficiaries. Amputees and patients, staying in the dormitories in Battambang, are fed and lodged free of charge. These people stay an average of ten days if they are trans-tibial amputees, fifteen to twenty days if trans-femoral amputees and seven to eight days if arm amputees. In the case of polio victims, the duration of the stay depends on the type of orthoses provided. Some 88 orthoses have been made and 52 polio victims fitted since October 1993. The ICRC only accepts simple cases where a follow-up for the patient can be guaranteed.

Current activities

Sixty local employees work in the Battambang workshop and thirty in the Phnom Penh workshop. The Ministry pays them a salary of US\$10-20 per month. As this is insufficient to live decently, the ICRC pays a monthly indemnity varying between US\$50-75 per month according to the qualifications of the employee.

The production unit for orthopaedic components is the only workshop of this kind in the Kingdom of Cambodia and covers the needs of the whole country. The basic material used for the prosthetic components is polypropylene, used in sheets or recycled. Stainless steel is used for orthotic components. The following components are produced: knees, ankle parts, alignment systems in aluminium, steel, stainless steel and polypropylene: wrists, crutches, walking frames, joints for orthoses etc. Some 20,287 components were manufactured in 1994 and altogether more than 200,000 various components have been produced since October 1991.

All the components are distributed free of charge to the organisations involved in fitting amputees and polio victims in Cambodia and who request them. Currently, the following organisations receive components from the ICRC: HI, AFSC, AMCROSS, VI, CT, NSPO. ICRC also provides crutches and walking frames to the hospitals in Mongkol Borei and Kantha Bopha in Phnom Penh.

In Battambang, the provision of prostheses and orthoses continues for the disabled of the North-west provinces with the components produced by Phnom Penh and the artificial feet produced by Handicap International. The treatment of the Khmer Rouge amputees has stopped because of insecurity prevailing in areas between their strongholds and Battambang.

During 1994, 1,569 prostheses and orthoses were manufactured. There are 53 employees at the Centre and three ICRC collaborators (two prosthetists and one physiotherapist).

MYANMAR: Yangoon, Mandalay, Pyin oo Lwin Beginning of the programme: 1986

During the year 1994, polypropylene technology was introduced at Mingaladon (military workshop of Yangoon) and Thamaing (civilian workshop of Yangoon). The other workshops have continued to produce prostheses made of wood and epoxy resin, they will use polypropylene at the beginning of 1995.

In Mandalay (civilian workshop) the previous workshop has been transferred to a new building and put under the responsibility of the General Hospital Chief Surgeon. In this action, the specific role of the ICRC is to implement a joint programme with the Myanmar Red Cross on behalf of amputees coming from the conflict areas. These patients are selected by a member of the Myanmar Red Cross and referred to Mandalay and Yangoon. In 1994, 198 prostheses were manufactured for this category of patient. The whole programme is due to be completed in 1995.

There are 99 employees working in this programme with the assistance of two ICRC prosthetists. Some 1,981 prostheses and orthoses have been produced during the year.

VIETNAM: Ho Chi Minh Ville Beginning of the programme: 1988

In 1994 the last co-operation agreement was signed between the ICRC and its counterpart, the Ministry of Labour, Invalids and Social Affairs (MOLISA). The two main goals of the contract were the provision of prostheses to the destitute amputees and the preparation for the ICRC's withdrawal from the country.

The workshop of the Ho Chi Minh Ville Rehabilitation Centre has achieved a good production amounting to a yearly total of 3,345 prostheses or a monthly average of 280. Though the quality of the prostheses has still to be improved, these figures show in general that the transfer to polypropylene technology has been fruitful and destitute amputees, among others, have benefited from it.

The technology transfer can be considered as completed by the end of 1994. The whole production process is now entirely the Centre's responsibility. The use of polypropylene is spreading over the country to other centres and other organisations operating in the field of prosthetics. In November, three workers from Quy Nhon Centre and two from Da Nang Centre came to Ho Chi Minh Centre for a training course of four weeks with World Vision's financial help. Another course is planned to take place in February 1995 for workers coming from Ba Vi Centre, an orthopaedic centre located in the North and supported by the German Agency for Technical Co-operation (GTZ). It is also worth mentioning that one of our expatriate technicians was invited by GTZ to its training workshop in Wuhan (China) for a one-week technical demonstration of polypropylene technology. With the change to polypropylene, a substantial contribution was made to the national Vietnamese ability to take care of future prosthetic production as the ICRC centre is the only place where polypropylene technology is mastered in Vietnam.

On 31 December 1994, the total number of registered destitute amputees (since April 1992, starting date of registration) reached 8,608 among which 3,797 have been fitted with prostheses and 173 provided with wheelchairs by the ICRC project. Some 4,600 patients are still to be fitted. As no new information campaigns have been launched, registration has decreased to about 30 amputees per month. However, we should bear in mind that a large number of amputees still remain out of ICRC's

reach in remote areas within the cleven provinces of the project and a survey has shown that the local population of amputees would amount to over 23,000 people.

There are 27 employees in the Centre and two ICRC prosthetists.

AZERBAHAN: Baku

In February 1994, two ICRC orthopaedic experts made a survey in order to evaluate the situation of the disabled (particularly amputees) in the Caucasus countries. In Azerbaijan, the survey concluded that there are approximately 9,000 amputees who are unable to benefit from reliable services, and if the ICRC decides to implement an action for them, an involvement of a minimum of five years should be considered.

In June 1994, the ICRC decided to start a programme in the Caucasus (Baku, Tbilissi and Gagra in Abkhazia). In August 1994, two ICRC prosthetists arrived in Baku in order to initiate the negotiations with the authorities and start work. A workshop was put at the disposal of the ICRC. It is located in an old rehabilitation centre which had been abandoned. The different parts of the workshop have an approximate area of 630m². Renovation has started and installation of equipment is planned for early 1995.

At the end of the year, a co-operation agreement has been signed between the ICRC and the Ministry of Labour and Social Protection (MOLASP) which appointed a head of project.

There are three ICRC prosthetists involved in this project.

GEORGIA: Tbilissi, Gagra

Following the survey in the Caucasus countries (mentioned above), the orthopacdic project in Georgia started in July 1994 with the arrival of two ICRC prosthetists. Its aim is to set up two orthopaedic centres, one in Tbilissi and one in Gagra (Abkhazia), for the amputee victims of the conflict.

In Tbilissi:

 A workshop has been put at the disposal of the ICRC in the Science Institute of Orthopaedics and Traumatology. The work of renovation has started at the end of the year. The Institute has provided accommodation for the patients within its premises.

- In December 1994, the Ministry of Health (MoH) and the ICRC have signed a cooperation agreement to define the tasks of both parties.
- The Mol1 has assigned six employees to the workshop and the ICRC has recruited three field officers.
- The fabrication of prosthetic components has started with the assistance of the technical coordinator from Geneva. A special thermoformable plastic (co-polymer of 80% polypropylene and 20% polyethylene) has been selected to resist low temperatures.
- Production of prostheses will start in 1995.
 Two ICRC collaborators are working in this programme.

In Gagra:

- An agreement of co-operation has been signed in September between the Ministry of Health (MoH) and the ICRC.
- An orthopaedic workshop of 300m² has been set up in the Rehabilitation Centre of the town and its renovation is completed. The accommodation of the patients will be provided by the administration of the Rehabilitation Centre.
- Six employees have been assigned to the programme by the MoH. They work in collaboration with two ICRC prosthetists. A practical training has already started for these employees.

The Special ICRC Fund for the Disabled

The aim of the Fund is to develop rehabilitation activities on behalf of disabled in countries where the ICRC criteria are not applied.

For this purpose it has been decided to use the "Prosthetic-Orthotic Centre" (POC) of Addis Ababa to organise technical courses for prosthetists from developing countries. The courses, of a duration of approximately 4 weeks, concentrate on the use of polypropylene for the manufacture of prostheses and prosthetic components: knees, feet, etc. In addition to the courses, the ICRC provides the respective workshops of the trainees with the necessary equipment to put into practice what they have learnt in Addis Ababa. This equipment includes special ovens, moulds, welding apparatus, etc. These expenses are covered by the Fund.

In 1994, 26 prosthetists spent between two and five weeks at the training course

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Table 1. Local personnel

| Countries | Prosthetists, physiotherapists, nurses, trainees, doctors | Technical personnel, general services | Total |
|-------------|--|--|-------|
| Mozambique | 29 | 49 | 78 |
| Ethiopia | 20 | 76 | 96 |
| Eritrea | 5 | 29 | 34 |
| Sudan | 20 | 64 | 84 |
| Kenya | 7 | 2 | 9 |
| Colombia | 12 | 32 | 44 |
| Afghanistan | 40 | 84 | 124 |
| Pakistan | 54 | 36 | 90 |
| Iraq | 8 | 19 | 27 |
| Vietnam | 13 | 14 | 27 |
| Cambodia | 27 | 33 | 60 |
| Myanmar | 59 | 46 | 105 |
| Syria | 7 | 4 | 11 |
| Lebanon | 13 | 8 | 21 |
| Georgia | 12 | 5 | 17 |
| Azerbaijan | 10 | 2 | 12 |
| TOTAL | 336 | 503 | 839 |

department of the POC. They came from Ethiopia, Eritrea, Lebanon, Nigeria, Uganda, Chad, Sri Lanka, Somalia, Angola, Sudan and Zambia. No training can be efficient if follow up is not organised. Once back in their professional environment, the trainees face specific problems which cannot be foreseen during the courses in Addis Abada. In consequence, technical visits to centres which sent trainees to the POC and which received equipment, is seen as an essential activity for 1995. These visits will also be financed by the Fund.

Technical developments

During the year improvements have been made in the fabrication of the polypropylene components and of the corresponding moulds:

- A new polypropylene foot has been developed and tested in Ethiopia, the ASB foot (Addis Spring Blade).
- A new and more precise knee mould has been made in Geneva using a better quality of aluminium.
- A new version of the alignment device (PPCAS) which gives a better access to the central nut has been produced.

Personnel

At the end of the year, the ICRC had a total of 26 personnel from ten different countries in the programmes:

- 20 prosthetists
- 5 physiotherapists
- 1 medical doctor

A further 839 local personnel were used as outlined in Table 1.

Activities foreseen for 1995

- Restart the orthopaedic programme in Angola. A first programme based in Huambo was launched in 1979 and had to stop in 1992 because of the conflict which affected the country in 1992 and 1993.
- Organise the final examinations in Lebanon, Syria and Sudan.
- Develop the use of polypropylene components in Afghanistan.
- Hand over the programme in Myanmar to the ICRC counterparts.
- Organise technical visits to former ICRC programmes which have been handed over such as: Colombia, Chad, Lebanon, Syria and also to the rehabilitation centres which have sent trainees to Addis Ababa Training Centre.