

At Phnom-Penh, two teams are busy in refugee camps while a third team, sent by the Swiss Red Cross, is working in the university pediatric hospital.

Red Cross relief activities have been intensified following the influx of new refugees to Phnom-Penh. In the provinces, despite transport difficulties, the Khmer Red Cross and AICR delegates assisted some 60,000 families or 300,000 persons, in 1973.

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### Democratic Republic of Vietnam

Soon after the Indo-China Operational Group (IOG)<sup>1</sup> was set up in December 1972 to promote and co-ordinate Red Cross international assistance plans for the various countries in Indo-China, it was called upon to organize and finance an emergency housing project to provide houses for 50,000-100,000 homeless persons in the Democratic Republic of Vietnam. Three months after the arrival of the first consignment of components of prefabricated houses, *Contact*<sup>2</sup> asked Mr. André Teikmans to reply to some questions on the progress of the project. Mr. Teikmans, a Swedish architect in Geneva in charge of the co-ordination of the emergency housing project, has just returned to Switzerland after spending several weeks in the Democratic Republic of Vietnam.

*Contact*: Mr. Teikmans, as Geneva co-ordinator of the emergency housing project in the Democratic Republic of Vietnam you have just carried out a second mission lasting three weeks in Indo-China. What made your trip necessary?

*Mr. Teikmans*: In the first place, I had to see for myself how the infrastructural work was proceeding in those towns where the scheme started: Hanoi, Haiphong and Nam Dinh. Since my last visit to the Democratic Republic of Vietnam last January with

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<sup>1</sup> Last month, we published a circular concerning changes in IOG responsibilities and organization as from April 1974.

<sup>2</sup> A new information bulletin mentioned earlier, from which this article is taken.

Mr. Stroh, IOG Director, a great deal has been done. In Haiphong, that stage of the work (levelling the ground, preparing foundations, laying the mains for drinking-water, electricity and sewage, etc.) is almost complete, while at Hanoi and Nam Dinh, eighty kilometres to the south-east, it is far advanced.

I had useful meetings with the Vice-Minister for Construction and his staff of architects and town planners, and also with North Vietnamese Red Cross leaders who have done a great deal to facilitate our task.

At the same time, I was able to obtain a good idea of the work completed so far by the technicians from Japan, Finland and Sweden who were sent over by the firms supplying the prefabricated houses. They will stay a few weeks in the country, to supervise the first operations involving the assembly and fixing of the components and to train their Vietnamese counterparts.

*Contact:* How is the assembly of the prefabricated housing progressing?

*Teikmans:* In Haiphong, at the end of April, 52 buildings, containing 312 homes for over 1,500 persons, will be ready for occupation. In Hanoi, we are working in two different areas. Twelve buildings, containing a total of seventy-two dwellings for 300 persons, will be ready in the Bach Mai hospital area by the middle of May. In Kim Lién district we are setting up about sixty dwellings for some 350 persons, and at Nam Dinh, 144 dwellings for about a thousand homeless will be ready by mid-May.

*Contact:* Where are they living now?

*Teikmans:* When their homes were destroyed, most of them found shelter with relatives or friends. A number fixed up temporary shelters for themselves, sometimes made from pathetically inadequate materials. Such dwellings, as you may well imagine, are extremely rudimentary and cannot resist the climatic conditions prevailing in the country for very long, I mean especially in the rainy season.

*Contact:* By the way, will these climatic conditions not create problems as regards the maintenance of prefabricated houses?

## IN THE RED CROSS WORLD

*Teikmans*: Yes indeed. Although the scheme is to meet an emergency, the dwellings are not temporary; they are expected to last for at least thirty years in spite of great humidity, rain, high temperature, and wind. The average relative humidity in the Democratic Republic of Vietnam is 80 per cent. In some cases it may be as high as 100 per cent. The average rainfall is 1.50 metres a year. During the hotter months, the temperature may easily go up to 35 or 40 degrees centigrade. Climatic conditions have been carefully studied, both as regards the general housing plan and the nature of the materials used.

While the maintenance of metal units from Japan is relatively easy, in the case of wood special treatment is required, particularly against termites and decay.

That is another reason why we are careful to provide dwellings of the same quality in a district or even in a locality, so that future maintenance by the occupants may be more convenient. It will greatly ease the solution of the same practical problems under identical material and climatic conditions. The North Vietnamese authorities contemplate bringing heads of families together from time to time in what can be described as maintenance co-operatives, to which residents can come with their problems and seek advice.

*Contact*: How are the prefabricated houses assembled?

*Teikmans*: The assembly of the prefabricated components has been so devised as to make it possible for workers who are not specialized eventually to carry out the work themselves. For the time being, as I have already mentioned, a number of foreign technicians provided by the firms are supervising the assembly work in the presence of Vietnamese who will soon take over responsibility for such operations. Besides, the prefabricated components are accompanied by instructions about storage, assembly and maintenance, and there are illustrations to demonstrate what is to be done.

*Contact*: Could you tell us briefly what a prefabricated dwelling looks like?

*Teikmans*: Each building consists of four or six dwellings or family units. A dwelling covers a surface of 20 to 25 square metres, and is composed of one or two rooms. A small courtyard separates the room from the kitchen-bath unit with its reservoir. The sanitary installations are outside. All rooms have electric light.

Obviously, these dwellings cannot from the outset satisfy the requirements of all inhabitants. However, each type of house can easily be adapted by the addition of extra windows, insulation, verandahs, or made larger by converting two houses into one.

*Contact*: What has been planned for the future?

*Teikmans*: We have ordered from Japan, Finland, Sweden and the Federal Republic of Germany a total of 4,000 family dwellings, to accommodate some 25,000 people. Half of these houses have been delivered or are en route. The remainder will have been delivered by the end of the year.

The intention is, of course, to install prefabricated houses also in other districts where required. Several sites have been chosen and work on the infrastructure could begin.

In any case, the IOG's emergency programme cannot solve the general housing problem in the Democratic Republic of Vietnam. It is after all, as its name clearly shows, an emergency measure, just one measure, in fact, of a number which are interconnected. The International Red Cross has merely started something which we hope will be followed up by other private bodies and by governmental organizations.

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