



VIE /85/019

Disaster preparedness and rehabilitation in Bình Trị Thiên Province, Vietnam
Sử bảo vệ chống thảm-hoa thiên-nhiên ở tỉnh Bình Trị Thiên, Việt Nam



CHUYÊN GIA KỸ THUẬT XÂY DỰNG NHÀ CHỐNG GIÓ BÃO
DEMONSTRATION OF STORM RESISTANT BUILDING TECHNIQUES

25

Interim Workshop



Overall presentation

January 1990

Development
Workshop

Viện Thiết Kế Nhà Ở - Công Trình Công Cộng, Hà Nội
Institute For Housing and Public Building Design

Xí Nghiệp Thiết Kế Khảo Sát Xây-Đựng, Huế
Institute For Building Investigation and Design

GRET



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Project VIE/85/019 Disaster preparedness and rehabilitation in Binh Tri Thien province

Sub project No.3: Demonstration of storm resistant building techniques

Financing: UNDP

Executing Agency: UNCHS-Habitat, Nairobi, Kenya

Vietnamese counterparts:

Institute for Housing and Public Building Design (IHPBD) Hanoi, Viet Nam

Institute for Building Design (IBD) Hué, Viet Nam

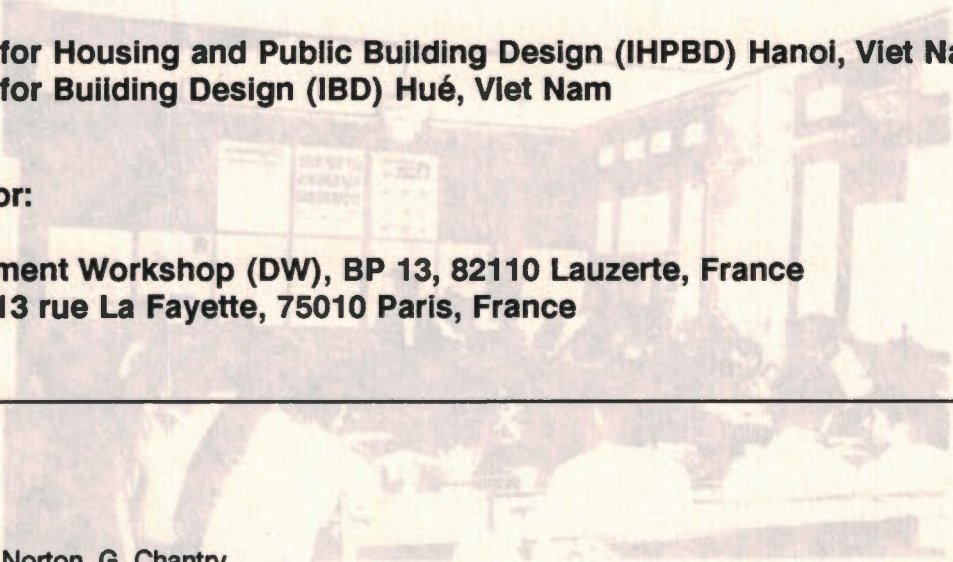
Subcontractor:

Development Workshop (DW), BP 13, 82110 Lauzerte, France

GRET, 213 rue La Fayette, 75010 Paris, France

Report:

Authors: J. Norton, G. Chantry



Overall presentation

January 1980



Institute for Housing and Public Building Design
XI Nguyn Thiê Kê Khê Bêi Xuyêng Huê



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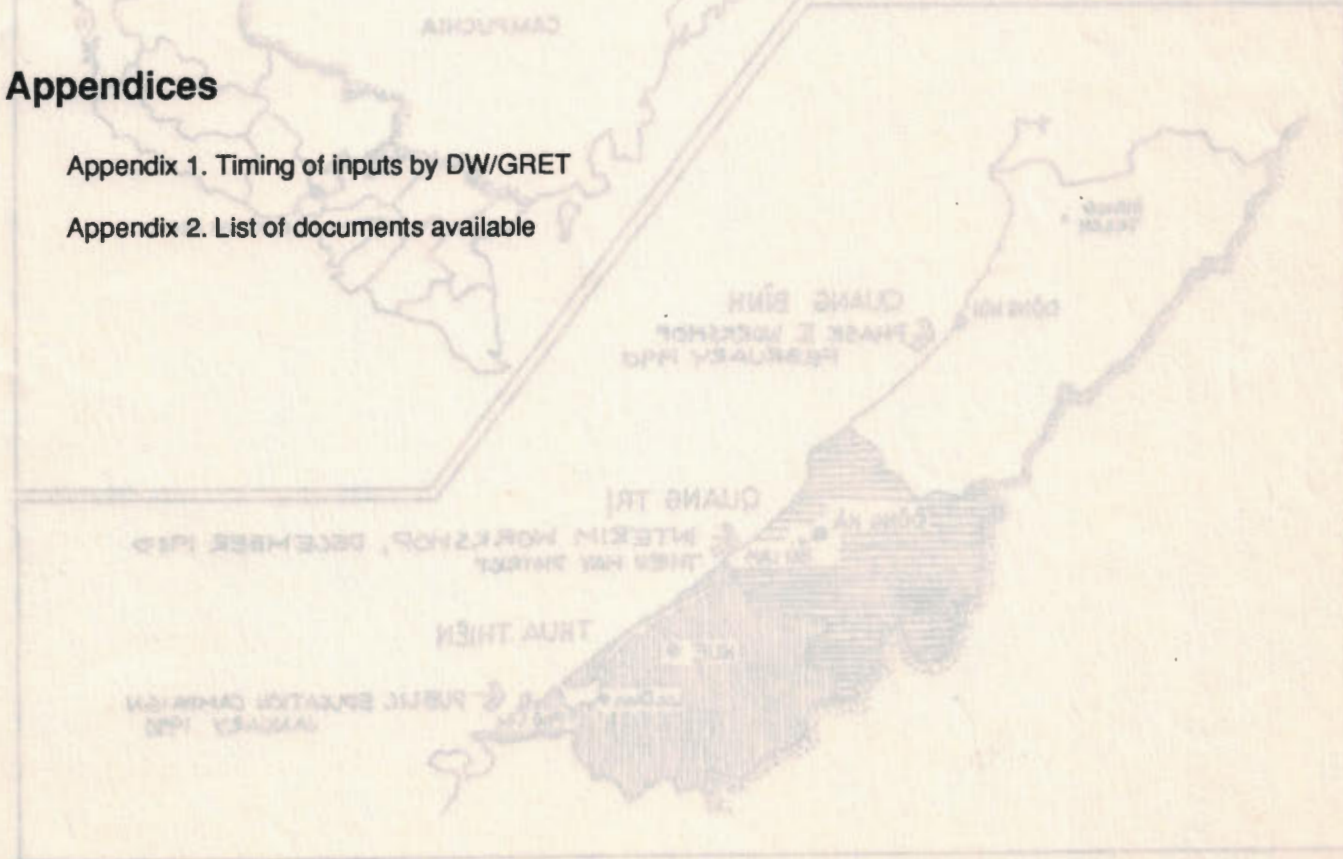
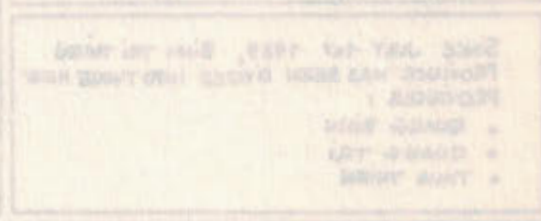
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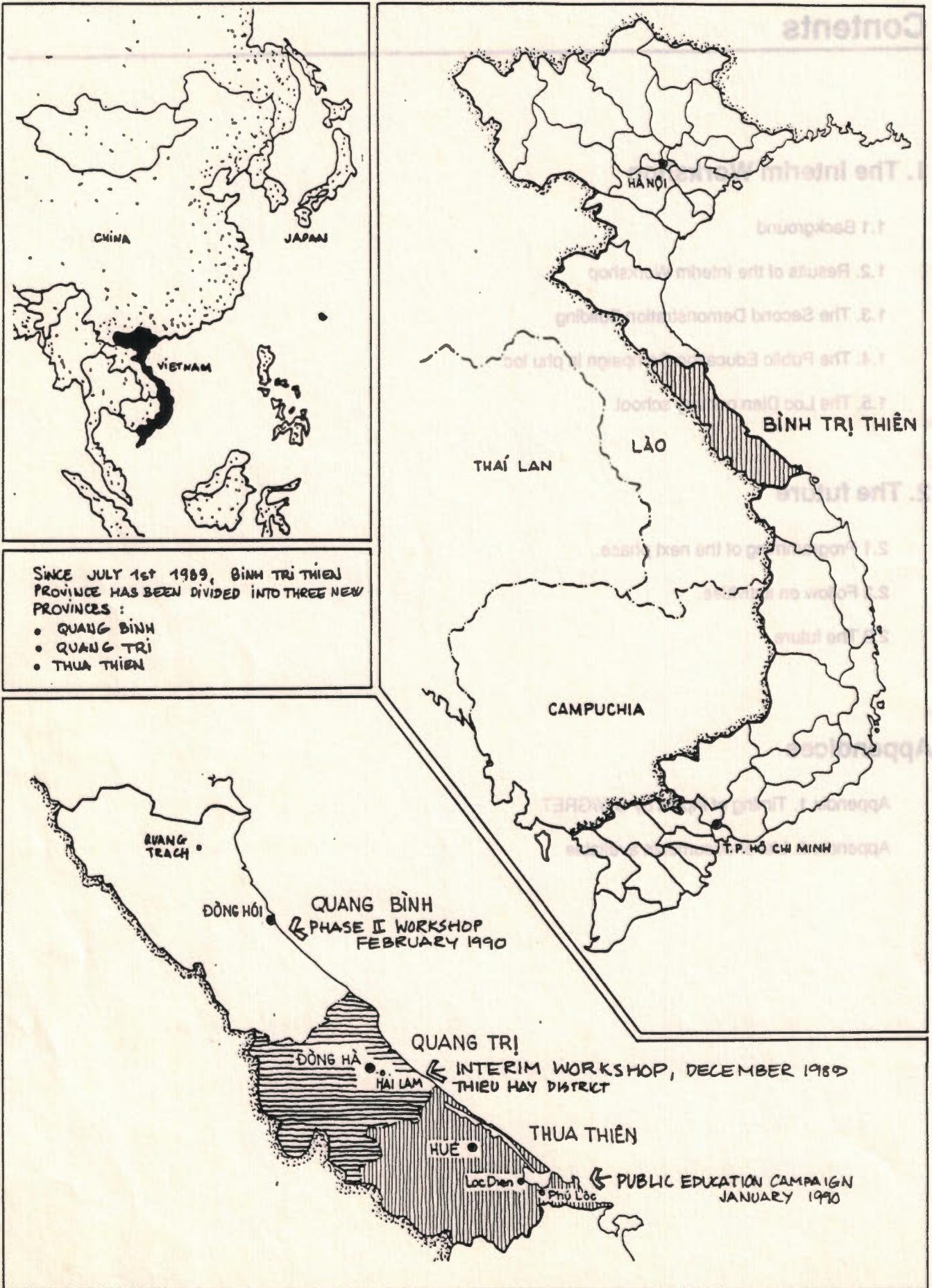
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1. The Interim Workshop

1.1 Background

In response to the typhoons which hit the central Viet Nam province of Binh Tri Thien in 1985, the activities of sub project No. 3 "Demonstration of storm resistant building techniques" of the UN programme VIE/85/019 Disaster preparedness and rehabilitation in Binh Tri Thien Province, began in January 1989. The first session of Workshops, organized by DW/GRET with our Vietnamese partners, IBD (Hué) and IHPBD (Hanoi) took place in May and June 1989, in the province of Thua Thien (the southern third of the old Binh Tri Thien province, sub-divided in June 1989 into Thua Thien, Quang Tri and Quang Binh provinces).

Following this first Workshop session, (See the report on "Session 1 Workshops: Overall Presentation" for details) it was decided that a second - and interim - Workshop should be organized, and be run by IBD and IHPBD, without, during the actual running of the workshop, any direct assistance from DW/GRET. This second workshop, held in Quang Tri province, was destined for the technicians of the province, who will then become the future District Advisers for Cyclone Resistant Construction, and constitute the Quang Tri Institute's Unit for Cyclone Resistant Construction. During the Workshop, the second demonstration building was to be designed by the participants.

In addition to training local technicians, the purpose of this Interim Workshop has been to test the training materials developed beforehand (by DW/GRET and during the first workshop sessions), and to see how well the training process operates without assistance. To facilitate this process, DW/GRET supplied a detailed programme and supporting materials, the titles of which are listed in Appendix 2.

Parallel to this Interim Workshop, IBD is coordinating a preliminary test in Phu Loc District (Thua Thien province) of the Public Education communication material and the role of the District Building Adviser for Cyclone Resistant Construction.

These two actions constitute the hand-over of communication and training materials developed for the project. Relative to the original programme, DW/GRET has undertaken two additional missions (one person) the first just before the workshop to help in preparations, and the second after it to evaluate the results. The dates of all the activities are listed in Appendix 1.

1.2 Results of the Interim Workshop.

The Interim Workshop took place at Thieu Hay, in Quang Tri from the 15th to the 27th December 1989 with 17 participants. The Phu Loc Public Education programme has run from the 2nd to the 20th January 1990.

The Interim Workshop has proved IBD's capacity to organize and run a workshop for technicians using the training methods and materials demonstrated and developed in the first Workshop.

On the negative side, there is a tendency to repeat too literally the work of the first Workshop, which is laudable when it concerns working methods, less so where the participants have been asked to identify and define solutions - both technical and for communication - which are really adapted to the local context - and not to that of the location of the previous workshop. This is an aspect that will be addressed during the next workshop phase in February 1990.

Overall, the results of the Interim Workshop are most encouraging, having achieved the following:

- * a further development of the training technique based on an analysis of the local situation (field surveys) and of working in groups, the latter being a method which suits the technicians who are the target of this aspect of the programme.
- * an improved knowledge about the technical, socio-cultural and economic reality of the locality.
- * the development of techniques which are adapted to the context - for example, the production of special roofing tiles with fixing holes for tying them down, a technique which was discussed in the first workshop and which has now been applied.

- * the further development of communication methods and materials for carrying the message of the programme to different target groups (Radio announcements, poetry, posters..).
- * the further development of the Action Plan to suit Quang Tri province, in liaison with the different bodies concerned (Provincial Building Institute, District Technicians, local builders and the population, local authorities..).
- * the design of the second demonstration building - the Health Centre at Hai Lam.
- * and the real constitution of the IBD Core Team for Cyclone Resistant Construction, who, in operating the Interim Workshop, have shown their efficiency and competence.

The English summary of the dossiers produced by the participants is attached under separate cover.

1.3 The second demonstration building: A health centre at Hai Lam, QUANG Tri Province.

The building has been designed during the workshop. The participants were divided into three groups, each of which produced a preliminary design. On this basis a single design was developed, and by the end of the Workshop plans, elevations and details were ready, as well as a preliminary bill of quantities and costs. A working dossier was then completed by IBD after the workshop. The design has incorporated the key points of anti-cyclonic design, whilst remaining typical of small public buildings in the area. DW/GRET have proposed several modifications, which have been agreed (please refer to the plan for grid numbers):

- * verandahs to be added on the end walls on axis 1 and 8 on plan;
- * verandah to be extended on elevation A to run between axis 3 and 7;
- * pergola to be continued on elevation A between axis 1 and 3 and 7 to 8, and similarly on elevation D between axis 1 and 8;
- * the building section is to be modified to incorporate high level openings in walls of rooms giving onto the central corridor, to improve cross ventilation;
- * the details should show the fixing of tiles to battens with wire (which is already noted in the notes).

The building design dossier is attached under separate cover.

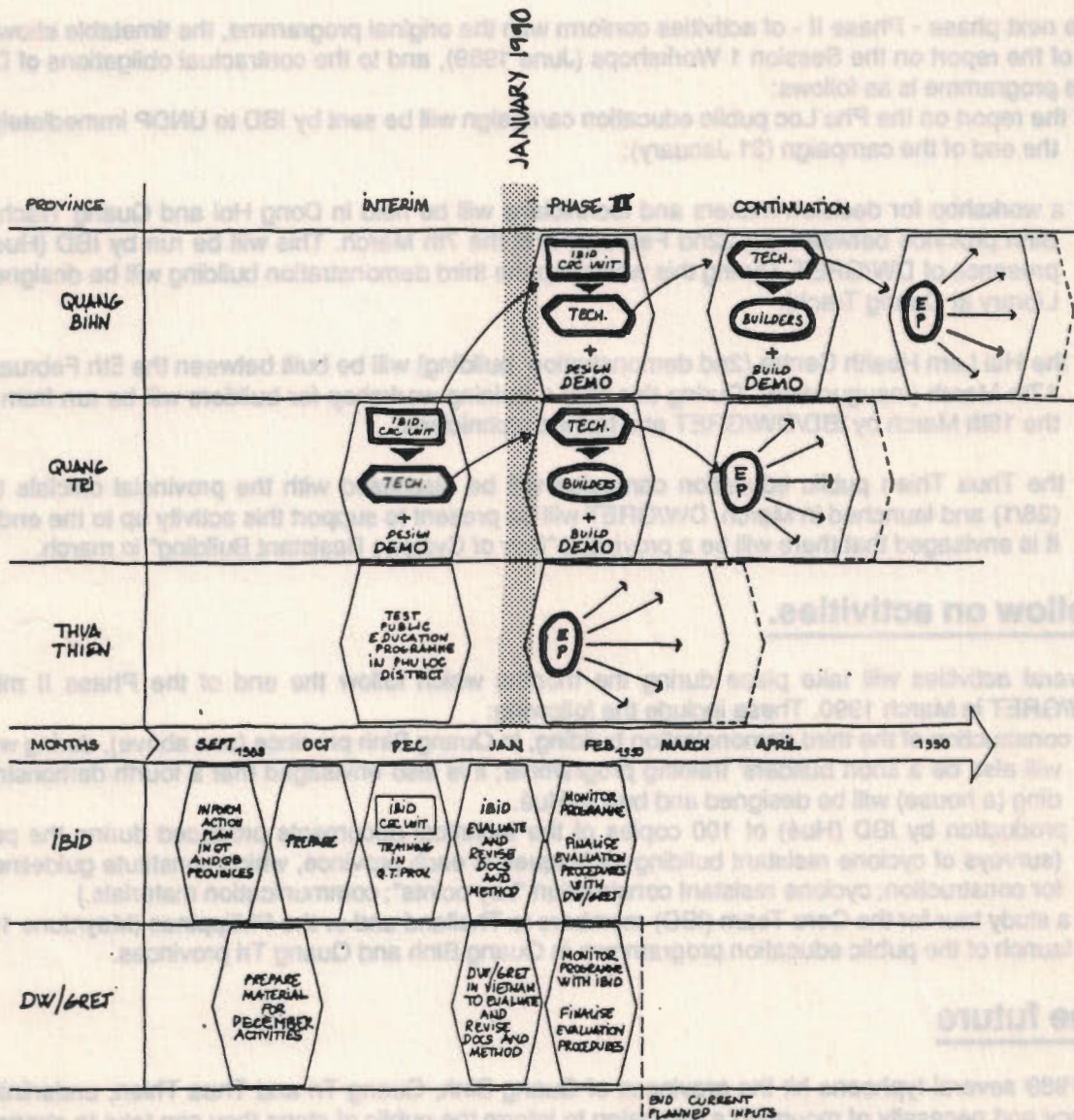
1.4 The Public Education Campaign in Phu Loc.

This campaign has been organized with the district services (Peoples Committee, Construction Service, Information Service and Education). The results will be evaluated in February 1990, following which the programme will be extended to the whole of Thua Thien province. A similar cycle will then be carried out in Quang Bin and Quang Tri provinces.

1.5 The Loc Dien primary school.

IBD have now completed the few remaining items which were needed in order to completely finish work on the first demonstration building, the primary school at Loc Dien, built in May/June 1989.

Programme of activities and status of the project



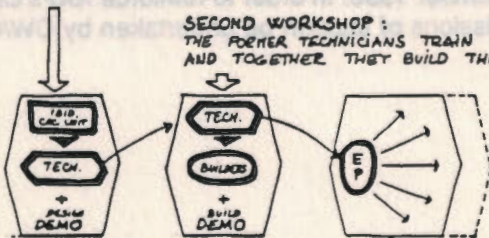
KEY:

FIRST WORKSHOP:

THE IBID CAC UNIT (CYCLONE RESISTANT CONSTRUCTION) TRAIN THE GROUP OF TECHNICIANS OF THE PROVINCE. TOGETHER, THEY DESIGN THE DEMONSTRATION BUILDING.

SECOND WORKSHOP:

THE FORMER TECHNICIANS TRAIN DISTRICT BUILDERS AND TOGETHER THEY BUILD THE DEMONSTRATION BUILDING.



LAUNCH PROVINCIAL PUBLIC EDUCATION PROGRAMME. TECHNICAL ADVISERS IN ALL DISTRICTS ADVISE PUBLIC AND TRAIN BUILDERS

2. The future

2.1 Programming of the next phase.

The next phase - Phase II - of activities conform with the original programme, the timetable shown on page 24 of the report on the Session 1 Workshops (June 1989), and to the contractual obligations of DW/GRET. The programme is as follows:

- * the report on the Phu Loc public education campaign will be sent by IBD to UNDP immediately following the end of the campaign (21 January);
- * a workshop for decision makers and technicians will be held in Dong Hoi and Quang Trach in Quang Binh province between the 22nd February and the 7th March. This will be run by IBD (Hué) with the presence of DW/GRET. During this workshop the third demonstration building will be designed (School Library at Quang Trach).
- * the Hai Lam Health Centre (2nd demonstration building) will be built between the 5th February and the 17th March (inauguration). During this time a training workshop for builders will be run from the 5th to the 16th March by IBD/DW/GRET and trained technicians.
- * the Thua Thien public education campaign will be discussed with the provincial officials before Tet (28/1) and launched in March. DW/GRET will be present to support this activity up to the end of March. It is envisaged that there will be a provincial "Day of Cyclone Resistant Building" in march.

2.2 Follow on activities.

Several activities will take place during the months which follow the end of the Phase II missions by DW/GRET in March 1990. These include the following:

- * construction of the third demonstration building, in Quang Binh province (see above), during which there will also be a short builders' training programme; it is also envisaged that a fourth demonstration building (a house) will be designed and built in Hué.
- * production by IBD (Hué) of 100 copies of the technical documents produced during the programme (surveys of cyclone resistant building techniques in each province, which constitute guideline manuals for construction; cyclone resistant construction "key points"; communication materials.)
- * a study tour for the Core Team (IBD) members to Thailand and or the Philippines (May/June 1990)
- * launch of the public education programmes in Quang Binh and Quang Tri provinces.

2.3 The future

In 1989 several typhoons hit the provinces of Quang Binh, Quang Tri and Thua Thien, underlining the urgency and necessity of mounting a campaign to inform the public of steps they can take to strengthen their buildings. 1990 provides the first major opportunity to do this, and, following the typhoon season, to see how much the programme has been able to help reduce damage and in what way it could be further developed. The next critical period for the programme therefore comes at the start of the main typhoon season roughly in August 1990, when IBD needs to re-launch the public education campaign at the time when people most urgently need to take steps to strengthen their buildings. IBD then needs to evaluate the results and the experience after the typhoon season, in December 1990. In order to reinforce IBD's capacity to undertake these tasks, it is recommended two short missions of support be undertaken by DW/GRET in August and December 1990.



Appendix 1. Timing of inputs by DW/GRET

Mision: G.Chantry for preparation of Interim Workshop: 27th Nov to 4 Dec 1989.

Interim Workshop: 15th to 27th December 1989

Mission: G.Chantry for evaluation of Interim Workshop: 6th to 10th January 1990.

Next inputs in Vietnam by DW/GRET are scheduled to start on the 14th February 1990 (J, Norton)

Incision report:

J Norton, Incision report and report on the construction of the demonstration building, February 1989, 22 pages (UNCHS)

Documentation for the 1st Workshop Sessions:

- Incision building in Central Vietnam, Development Workshop/GRET, April 1989, 44 pages (UNCHS)
- Demonstration Building: Primary school, Loc Dien, Phu Loc District, Development Workshop/GRET, April 1989, 50 pages (UNCHS)
- Cyclone Resistant Construction - basic information, Development Workshop/GRET, April 1989, 81 pages (UNCHS)
- Cyclone Resistant Construction - manuals, Development Workshop/GRET, April 1989, 43 pages (UNCHS)
- 10 key cyclone resistant building principles, Development Workshop/GRET, April 1989, 10 pages (UNCHS)
- Details of the HRSD exhibition "Cyclone resistant construction", HPHD, Hanoi, 1987, 83 pages (UNCHS)
- Demonstration Building: Primary school, Loc Dien, Phu Loc District, Development Workshop/GRET, April 1989, 10 page leaflet (UNCHS)

Documentation produced during or following the 1st Workshop Sessions:

- Loc Dien Primary School, Development Workshop/GRET/HRSD, June 1989, 18 pages (UNCHS)
- Loc Dien Primary School, Development Workshop/GRET/HRSD, June 1989, 2 pages (English and Vietnamese) (UNCHS)
- Participants in workshop - "Session 1 workshop - Results of working groups, Development Workshop/GRET/HRSD, June 1989, 18 pages (English and Vietnamese) (UNCHS)
- Participants in workshop - Leaflet: "10 key cyclone resistant building principles", ID/DW/GRET, June 1989 (Vietnamese)
- Participants in workshop - Poster: "10 key cyclone resistant building principles", ID/DW/GRET, June 1989 (Vietnamese)
- J Norton, G Chantry, "Session 1 workshop - Overall presentation", Development Workshop/GRET, June 1989, 30 pages (UNCHS)

Documentation for the Interim Workshop:

- Programme of support and advice to the population - first field test in Phu Loc, Thua Thien Province, Nov 89, Programme Presentation, Development Workshop/GRET, September 1989, 5 pages (UNCHS)
- Interim Workshop, Quang Th Province, November 1989, Programme Presentation, Development Workshop/GRET, September 1989, 8 pages (UNCHS)
- Video support to Workshop, Comments (English - Vietnamese), Development Workshop/GRET, October 1989, 8 pages (UNCHS)
- 10 key cyclone resistant building principles, Vietnamese version, 4 page leaflet, Development Workshop/GRET, October 1989 (UNCHS)
- 10 key cyclone resistant building principles, Poster, ID/DW/GRET, June 1989 (Vietnamese)

Documentation produced during or following the Interim Workshop:

- Interim Workshop, Quang Th Province, Dec 1989, Programme presentation, ID, December 1989
- Session II Workshop, Overall Presentation, ID, January 1990 (English and Vietnamese Version)
- Design Details for second Demonstration Building, "The Lam Health Centre", ID, December 1989
- J Norton, G Chantry, Interim Workshop, Overall Presentation, Development Workshop/GRET, January 1990, 5 pages (UNCHS)

Video:

- Video support to Workshop, Comments (English - Vietnamese), Development Workshop/GRET, October 1989, Video film VHS-FAL, with comments (UNCHS)

Appendix 2. List of documents available

Inception report:

- J. Norton: "Inception report and report on the formulation of the workshop", Development Workshop/GRET, February 1989, 26 pages + appendices. (UNCHS)

Documentation for the 1st Workshop Sessions:

- "Session 1. 22 may - 17 june 1989, Hué" Development Workshop/GRET, April 1989, Programme Leaflet. 4 pages, (UNCHS)
- "Indigenous building in Central Vietnam", Development Workshop/GRET, April 1989, 44 pages. (UNCHS)
- "Demonstration Building: Primary school, Loc Dien, Phu Loc District", Development Workshop/GRET, April 1989, 20 pages. (UNCHS)
- "Cyclone Resistant Construction - basic information", Development Workshop/GRET, April 1989, 81 pages. (UNCHS)
- "Cyclone Resistant Construction - manuals", Development Workshop/GRET, April 1989, 42 pages. (UNCHS)
- "10 key cyclone resistant building principles", Development Workshop/GRET, April 1989, 10 pages. (UNCHS)
- Dossier of the IHPBD exhibition "Cyclone resistant construction" IHPBD, Hanoi, 1987, 53 pages.
- "Demonstration Building: Primary school, Loc Dien, Phu Loc District", Development Workshop/GRET, April 1989, 10 page leaflet. (UNCHS)

Documentation produced during or following the 1st Workshop Sessions:

- "Loc Dien Primary School" Development Workshop/GRET/IBID/IHPBD, June 1989, 16 pages. (UNCHS)
- "Action Plan" Development Workshop/GRET/IBID/IHPBD, June 1989, 9 pages. English and Vietnamese. (UNCHS)

Participants in workshops - "Session 1 workshops - Results of working groups" Development Workshop/GRET/IBID/IHPBD, June 1989, 16 pages. English and Vietnamese. (UNCHS)

Participants in workshops - Leaflet: "10 key cyclone resistant building principles", IBD/DW/GRET, June 1989 (Vietnamese)

Participants in workshops - Poster: "10 key cyclone resistant building principles", IBD/DW/GRET, June 1989 (Vietnamese)

- J. Norton; G. Chantry: "Session 1 workshops - Overall presentation" Development Workshop/GRET, June 1989, 30 pages. (UNCHS)

Documentation for the Interim Workshop:

- "Programme of support and advice to the population - first field test in Phu Loc, Thua Thien Province, Nov 89: Programme Presentation" Development Workshop/GRET, September 1989, 5 pages. (UNCHS)
- "Interim Workshop, Quang Tri Province, November 1989: Programme Presentation" Development Workshop/GRET, September 1989, 8 pages. (UNCHS)
- "Video Support to Workshops; Comments (English - Vietnamese)" Development Workshop/GRET, October 1989, 8 pages (UNCHS)
- "10 key cyclone resistant building principles" Vietnamese version, 4 page leaflet, Development Workshop/GRET, October 1989 (UNCHS)
- "10 key cyclone resistant building principles", Poster, IBD/DW/GRET, June 1989 (Vietnamese)

Documentation produced during or following the Interim Workshop:

- "Interim Workshop Quang Tri Province, Dec. 1989." Programme presentation, IBD, December 1989
 - "Session II Workshops, Overall Presentation" IBD, January 1990, English and Vietnamese Version
 - Design Dossier for Second Demonstration Building: "Hai Lam Health Centre" IBD, December 1989
- J. Norton, G. Chantry "Interim Workshop, Overall Presentation" Development Workshop/GRET, January 1990, 5 pages (UNCHS)

Video:

"My husband builds our house" Development Workshop/GRET; IBID/IHPBD/Hué TV, June 1989, 17' (UNCHS)

"Video Support to Workshops; Comments (English - Vietnamese)" Development Workshop/GRET, October 1989, Video film VHS-PAL, with comments (UNCHS)