

**REPORT FOR THE EVALUATION
OF ECHO'S ACTIONS IN
THE DEMOCRATIC PEOPLE'S
REPUBLIC OF KOREA 2001-4**

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Glossary

ADRA	Adventist Development and Relief Agency
CAP	Consolidated Appeal Process
CB	capacity building
CESVI	Cooperazioni e Sviluppo (Cooperation and Development)
CMB	cereal milk blend
CSB	corn soy blend
CWW	Concern Worldwide (often referred to as Concern)
DFID	Department for International Development (United Kingdom government)
DPRK	Democratic People's Republic of Korea
DPRKRC	National Red Cross Society of DPR Korea
EC	European Commission
ECHO	European Commission Humanitarian Aid Office
ECOSAN	variety of composting latrine
EU	European Union
F-100	therapeutic milk
FAO	United Nations Food and Agricultural Organization
FDRC	Flood Disaster Relief Committee
FPA	Framework Partnership Agreement
FSU	European Commission Food Security Unit
GAA	German Agro Action
GIEWS	Global Early Warning System
HI	Handicap International
IEC	Information, Education, Communication
IFE Core Group	Infant Feeding in Emergencies Core Group
IFRC	International Federation of Red Cross and Red Crescent Societies
INGO	International NGO
IVF	intravenous fluid
KASD	Korean Association for Supporting the Disabled
LoU	Letter of Understanding
LRRD	link between relief rehabilitation and development
MMR	maternal mortality rate
MOCM	Ministry of City Management
MOPH	Ministry of Public Health
NGO	non-governmental organization
PHAST	Participatory Hygiene and Sanitation Transformation
PMU	PMU Interlife
PU	Premier Urgence
Ri	Rural district in DPRK
RMB	rice milk blend
RoK	Republic of Korea (South Korea)
SDC	Swiss Development Cooperation
SCF	Save the Children Fund
T.A.	technical assistant
TRIANGLE	Triangle Génération Humanitaire
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
VIP	ventilated improved pit-latrine
WFP	World Food Programme
WHO	World Health Organization

Executive Summary

1. Introduction

1. The Democratic People's Republic of Korea continues to pursue economic and social policies that no longer have close parallels elsewhere. The political, social and economic environment has profound implications for international agencies working in the country.

2. The country underwent serious economic decline in the 1980s and 1990s. In 1995 floods destroyed a good part of the harvest, and for the first time in its history the country appealed for international assistance. Further natural disasters in 1996 and 1997 exacerbated a situation which was already very serious, leading to famine and starvation.

3. 1998-2002 saw only limited recovery of an unreformed economy and only gradual improvement in the humanitarian crisis. Economic reforms introduced in July 2002 have led to comparatively rapid change, and the partial development of a market-oriented economy at local levels. The loosening of price controls has increased the vulnerability of groups whose incomes have not increased accordingly.

4. A new crisis over the nuclear issue in October 2002 led to cuts in oil imports and in food aid, though two years later donors were once again meeting the food needs as estimated by WFP. Child malnutrition was still serious in late 2002, though significantly improved from four years earlier.

5. Humanitarian programmes are greatly hampered by restrictions on access and data-gathering and the secrecy or unavailability of even basic information. Steady improvements in this environment may have stopped or gone into reverse in late 2004.

6. ECHO has responded to the humanitarian crisis in DPRK since its beginning in 1995 and continues to do so despite the nuclear crisis. To date €75 million has been allocated for humanitarian assistance, primarily in the fields of health and nutrition, water and sanitation, and food. Additionally the EU has allocated more than €90 million under the food security budget line.

2. Purpose and Methodology

7. The purpose of the evaluation is 'to assess the appropriateness of ECHO's interventions since 2001 ... and to produce recommendations for improving the effectiveness of future operations.' Evaluation methodology focused on documentary research and interviews with primary stakeholders. The evaluation team spent three weeks in DPRK, spending about half our time on field visits to ECHO-supported projects.

8. We have organized our findings primarily by sector, and have divided our report into three sections:

- (A) Background, context and general or global issues
- (B) ECHO-supported interventions by sector
- (C) Cross-cutting issues

The purposes and methodology of the evaluation are elaborated in Section A1 below, and the Terms of Reference are appended as Annex A.

3. Principal conclusions

General

9. The humanitarian emergency in DPRK continues. The economic reforms of 2002 have created winners and losers, extending the ranks of the vulnerable.

10. Restrictions on information and data gathering make objective assessment of humanitarian needs exceptionally difficult in DPRK. However national nutrition surveys, and informal data on the household economy, illustrate the continuing seriousness of the situation.

11. ECHO's response to this longstanding humanitarian emergency has been broadly appropriate, both in terms of institutions supported and sectors addressed.

12. Since DPRK institutions are not in a position to provide accountability, ECHO has been right to support UN agencies and Red Cross societies, and to support and promote European NGOs.

13. Since the beginning of the emergency in 1995 international agencies have worked under severe restrictions in DPRK, with limitations on access and very limited accountability. These restrictions eased gradually over the years but increased again from September 2004.

14. Agencies have generally been unable to work with technically qualified Korean counterparts, limiting opportunities for training and capacity building.

15. On 15th September 2004 the DPRK government announced its intention to impose further restrictions on the activities of international humanitarian agencies, including visits to projects for monitoring (in practice for any) purposes. Although the short term impact has been limited, the long term implications, though uncertain, are likely to be very considerable - especially for international NGOs, of whom ECHO is the principal sponsor.

16. There are no genuinely independent or non-governmental agencies in DPRK, though there are three or four agencies with a degree of autonomy, notably the DPRK Red Cross, who provide exceptional opportunities for collaboration. Such collaboration greatly increases impact.

ECHO-supported projects and programme issues

17. The provision of essential drugs and medical supplies has been appropriate, even though the commitment has been long term and open-ended, with uncertainty as to when the government will be able to take over.

18. The rehabilitation of health institutions, children's homes and schools is also appropriate. Lack of knowledge about the overall reasons for the institutionalization of children in DPRK is an important concern.

19. Support for improved reproductive health and safe delivery is believed to be particularly relevant, though the programme would benefit from better geographical focus.

20. Projects for IVF production and blood banks are effective and popular with DPRK authorities. Comparison with alternatives would determine their degree of relevance. Sustainability may be problematic.

21. Current work in support of the handicapped provides an excellent model for collaboration between an international NGO (HI) and a Korean agency (KASD), second only to the case of the Red Cross (IFRC and DPRKRC). The sustainability of the work in prosthetics would improve with the identification of additional donors.

22. Despite uncertainties surrounding the assessment of needs, the evaluators believe ECHO's support to WFP for food aid has been justified, as well as an affirmation of humanitarian principles in a highly politicized arena. Food aid is comparatively well targeted in DPRK.

23. Support for nutrition work should be a priority, but at a local level remains limited. F-100 fortified milk is being used inappropriately and (as we show in the report) possibly harmfully. Support for micronutrient premix is highly appropriate.

24. Drinking water supply provision has been a large and successful area of ECHO support. Impact has been considerable though often offset by the absence of wastewater management. Assessment is greatly hampered by the lack of data on water quality.

25. Provision of sanitation to institutions has generally been justified, though impact is difficult to assess. Provision of domestic sanitation has followed models which are not affordable to householders, making the interventions ineffective and unreplicable.

26. ECHO management has been very capable, and current staffing is appropriate. Interagency coordination has been good. Relations with central authorities however are often problematic for ECHO partners. Agencies with a sub-office or regional base have been able to develop much better relationships with local authorities. Tendering and procurement has often been problematic and caused delays but the situation is improving.

4. Principal recommendations

NB These are not listed in order or priority but follow the same sequence as the conclusions above, and of the report itself. Detailed recommendations can be found at the end of relevant sections of the report.

- R1. The evaluation supports the continuation of ECHO's programme in DPRK, broadly along current lines. If DPRK government policies and ECHO finances permit, the evaluators would support the expansion of the programme.
- R2. Priority should continue to be given to a wide-ranging dialogue with relevant stakeholders, with a view to maintaining and developing an objective view of the opportunities and constraints of working in the exceptional environment of DPRK.
- R3. Despite recommendation R1 above, particular care needs to be taken continually to adapt the programme to changing circumstances, especially since the rate of change in DPRK may accelerate considerably in coming years.
- R4. Distribution and monitoring regimes relating to the supply of essential drugs and equipment should be standardized as far as possible, and if possible upgraded to conform with WHO guidelines should the necessary funding become available.
- R5. An external review should be undertaken of the programmes distributing drugs and essential medical equipment, as implemented by UNICEF, the Red Cross, UNFPA and WHO...
- R6. Coordination between all agencies involved with the distribution of drugs and medical supplies in DPRK should be further improved, with a view to standardizing approaches as far as possible. If possible a central database should be established.
- R7. Serious efforts should be made to find out the reasons for the institutionalization of babies and children in DPRK, despite the difficulties involved..
- R8. Local/regional distribution of IVF should be promoted. Traditional IVF production should be evaluated. New donors should be sought for long-term provision of consumables to the IVF and blood bank projects.
- R9. New donors should be sought to promote the sustainability of work with the handicapped.
- R10. ECHO (and/or other EC instruments as appropriate) should continue to consider the provision of support for food aid, particularly if shortfalls recur.
- R11. WFP should be encouraged to analyse and disseminate relevant data in its possession relating to nutritional vulnerability. .

- R12. Interventions in nutrition at a local level should be promoted, if possible through the introduction of appropriate NGO partners.
- R13. Efforts should be made by ECHO and its partner agencies to find out more about the effectiveness of the treatment of malnourished babies and children both in institutions and in hospitals, particularly in provincial paediatric hospitals. The provision of F100 fortified milk should be reviewed in the light of these findings. Infant formula and/or proper milk sources should in any case be substituted for F100 where appropriate.
- R14. If feasible, assessment of micronutrient deficiencies should be incorporated into any future national nutrition survey.
- R15. ECHO should continue to support the provision or rehabilitation of drinking water supply systems. Gravity-based systems should continue to be preferred, and should be given even greater comparative priority. Urban rehabilitation projects should continue to be considered.
- R16. Water supply projects should always include training and capacity building for Korean technicians. Projects should not be implemented where local technicians are not available.
- R17. Wastewater management should always be given priority consideration in the planning of water supply projects, and incorporated where feasible. Projects should never be undertaken where lack of wastewater management is likely to negate the impact of the project.
- R18. An external evaluation of UNICEF water supply projects should be undertaken.
- R19. ECHO should continue to support initiatives in institutional sanitation, prioritizing hospitals and residential institutions.
- R20. ECHO should only support domestic sanitation infrastructure if the costs are low enough to be borne by householders and so can be replicated. Hygiene promotion should continue to be prioritized, despite the difficulties associated with this.
- R21. ECHO should encourage partner agencies to take fully into account the logistical implications of working in the far north-east of the country, and the consequences on their overall impact and efficiency.
- R22. In appropriate cases ECHO should continue to encourage international agencies to establish regional sub-offices as and when this becomes feasible, if necessary through the provision of financial support.
- R23. External part-time technical support for project appraisal and assessment should be promoted, particularly in the fields of nutrition and sanitation.
- R24. As a prominent donor and leading humanitarian player ECHO should continue to give priority to and if possible upgrade further its liaison and advocacy with the DPRK authorities, particularly at the highest levels.

SECTION A: BACKGROUND AND CONTEXT

A1.Purpose and Methodology of the evaluation

27. The evaluation was the first undertaken ECHO's programme in DPRK. The terms of reference are attached as Annex A. During briefing meetings and discussions in Brussels on 23rd September 2004 the following addition to the terms of reference was adopted:

General

The evaluation will additionally consider ECHO activities in DPRK during the first nine months of 2004. The evaluation will take note of ECHO activities prior to 2001 where these are of particular relevance. The primary emphasis of the evaluation will be on activities taking place in 2003 and 2004.

Para 57, 5th bullet point, first sentence

The report will incorporate an assessment of regional issues in DPRK but will not necessarily use this as a primary parameter in how the report itself is organized.

28. The consideration of recent developments is particularly important since this may prove to have significant consequences for the future of ECHO activities in DPRK. An outline of these events is contained in Section A2 below.

29. The purpose of the evaluation is 'to assess the appropriateness of ECHO's interventions since 2001, in accordance with ECHO's mandate, in order to establish whether they have achieved their objectives, and to produce recommendations for improving the effectiveness of future operations.' At a global level, the evaluation is required to analyse developments in the humanitarian situation in DPRK and assess the extent to which ECHO has been able to adapt its strategy to changing circumstances, as well as the coherence and complementarity of ECHO's strategy in relation to other instruments and stakeholders.

30. The methodology of the evaluation focused on documentary research combined with open and semi-structured interviews with primary stakeholders. These included ECHO staff in Pyongyang and Brussels; staff and counterparts of agencies supported by ECHO; DPRK officials at national, regional and local level; and members of EU member state missions in the country. The levels of interest in and cooperation with the evaluation mission were high, and the degree of involvement and support shown by EU ambassadors was exceptional. The evaluation team would like to thank all those involved. For details of people met and meetings held please see Appendix B.

31. The evaluation team was in Brussels from September 24th-26th for briefing, planning and initial documentary research, and was in DPRK from October 12th to November 2nd. The first week in DPRK was primarily spent interviewing stakeholders in Pyongyang. An inception report was produced towards the end of this period. The next nine days were spent in fieldwork, i.e. visiting project sites and local stakeholders, firstly in the eastern part of the country and subsequently in areas in and around Pyongyang. The last few days were spent on some final meetings, including two feedback workshops held on October 29th with ECHO's partner agencies - the first on health, nutrition and food security, the second on water and sanitation. A

preliminary report was produced in-country and discussed with ECHO staff in Pyongyang on November 1st.

Note on format

32. ECHO has grouped its interventions in DPRK into three broad sectors (health, water and sanitation, and nutritional support/food aid). All these sectors relate to the health status of the population and are fundamentally interrelated; moreover interventions in these areas can be mutually reinforcing. In order to analyse ECHO's interventions it is necessary to divide them into categories, even though these categories overlap or are slightly arbitrary.

33. We have therefore organized our research and analysis primarily by sector. This is reflected in the framework for this report, which comprises three sections:

- (A) Background, context and general/global issues
- (B) ECHO-supported interventions by sector
- (C) Cross-cutting issues

34. Section (A) covers the 'global' issues specified in the terms of reference, focusing on those we consider particularly relevant to the unique circumstances of DPRK. Section (B) deals with operational and programmatic matters and is organized along sectoral lines, following ECHO's own broad categorization. Section (C) covers cross-cutting and operational issues.¹ Conclusions and recommendations are included at the end of each subsection. The index to the report illustrates this overall outline.

A2. Developments in DPRK

35. The Democratic People's Republic of Korea, founded in 1948, continues to pursue policies based on socialism and self-reliance that no longer have parallels anywhere else in the world, even in other countries run by communist parties. The comparative continuity of policy in DPRK, at least until very recently, has been primarily influenced by the unresolved conflict in the Korean peninsula. The social, political and economic environment has profound and often unanticipated implications for international agencies working in the country.

36. Economic progress in DPRK was very considerable until the 1970s. However the demise of the Eastern Bloc, along with economic and policy changes in China, led first to a sharp decline in the international trade, and eventually to the virtual collapse of the DPRK economy. In 1995 the country was hit by devastating floods which destroyed a good part of its harvest. For the first time in its history the country appealed for international assistance. Further floods in 1996 were followed by a drought and tidal wave in 1997. These natural disasters exacerbated a situation which was already becoming serious, and led to starvation and famine. Hundreds of thousands of people are believed to have perished.

¹ In this way we have incorporated global, operational and sectoral aspects into our analysis whilst organizing our findings primarily along sectoral lines, reflecting the realities of the DPRK programme. In other words our specific findings relating to the programme, as set out in Sections (B) and (C), are in both cases organized primarily by sector. Section (A) however deals with issues of broader relevance.

37. A joint UNICEF/WFP/EU nutrition survey conducted in November 1998 found an acute malnutrition rate of 16 per cent, the highest in East Asia. 62 per cent of the 1800 children surveyed were affected by chronic malnutrition or stunting. Nutrition related vulnerability in DPRK is compounded by the incidence of disease, unsafe drinking water and poor sanitary conditions.

38. The period from 1998-2002 finally saw a halt to the long term economic decline, though the economy remained unreformed and recovery was extremely limited, with only gradual amelioration of the humanitarian crisis. Economic reforms introduced in July 2002 however led to significant changes, and the partial development of a market-oriented economy at local levels. Some estimates put the proportion of private and informal economic activity as high as 50%.² The reforms may represent a belated start on the road to economic recovery, but the loosening of price controls has increased the vulnerability of groups whose incomes have not increased accordingly.

39. Although these reforms were widely welcomed, DPRK's international relations, especially with the USA, deteriorated sharply in October 2002 over the nuclear issue. The abrogation of the 1994 agreement between DPRK and the USA led to a reduction in oil imports which has had a significant effect on energy supplies within the country. Food aid from many sources was cut in response to this crisis, leading to a dramatic increase in the estimated food gap. By late 2004 however, donors were once again meeting food needs as estimated by WFP.³

40. A second nutrition survey reported in February 2003. Figures for child malnutrition gave stunting as 39% and wasting as 8%. These figures were still high but compare with 64% stunting and 20% wasting in 1998. A third survey, reporting early in 2005, should give some indication as to whether the gradual improvements of 1998-2002 have extended into the period following the nuclear crisis.

41. The reforms of 2002 included a degree of decentralization, but no significant liberalization in a country that considers itself to be on a permanent war footing. Basic social and economic data remain difficult or impossible to obtain, placing profound obstacles in the way of serious assessment of humanitarian interventions. Movement is restricted for expatriates and citizens alike and random access to project sites is denied to a larger extent. Socialization between Koreans and foreigners is almost non-existent. The pronouncement of September 15th 2004, described below, indicate that possibly improvements in these areas may now be going into reverse.

42. ECHO has responded to the humanitarian crisis in DPRK since its beginning in 1995. To date €75 million has been allocated for humanitarian assistance, primarily in the fields of health and nutrition, water and sanitation, and food.⁴ The great proportion of EU food aid, more than €90 million, was allocated under the food

² Interview with WFP, 1/11/04. As always, this can be no more than an extremely approximate estimate.

³ In December 2004 renewed tensions between DPRK and Japan meant that a significant part of this aid might not materialise after all.

⁴ Funds allocated for the period covered by the evaluation are approximately €57 million if 2004 allocations are included, or €41 million if they are not. No 2004 allocations had been spent at the time of the review.

security budget line and managed by the Food Security Unit. However significant food aid was also provided by ECHO following the sudden increase in the ‘food gap’ in 2002.

43. ECHO’s funding has been to United Nations agencies, Red Cross societies and European NGOs. ECHO is the major sponsor of international NGOs in DPRK, especially since 2002, and particularly in the field of water and sanitation

44. On September 15th the DPRK government announced that it wished to discontinue the Consolidated Appeal Process (CAP), and intended further to restrict the activities of international humanitarian organizations working in the country, particularly with regard to the monitoring of projects by expatriates. This announcement was unexpected, since it followed several years of gradually improving relations and cooperation between international agencies and the DPRK authorities.

45. The September 15th statement generated considerable unease within the international community, but over the next six weeks most agencies reported only fairly minor additional restrictions or inconveniences, and a few reported none at all. However on October 29th Jean-Jacques Graisse, Deputy Executive Director of WFP and leader of a high level inter-agency UN mission, reported that the government had confirmed that such restrictions would indeed be implemented, would be significant and would still include:

- reductions in the numbers of expatriate staff permitted to work in the country
- reductions in the numbers of expatriate ‘monitoring’ visits to project sites
- discontinuation of visits to Korean households by expatriates
- some NGOs having to leave the country after finishing their current projects

46. Although the exact parameters remain uncertain and will doubtless vary between different agencies, the impact on NGOs in particular could well be very considerable. Historically, the problems associated with working in conditions of limited access and accountability have deterred a number of NGOs from working in DPRK, or have led to their premature departure. The terms of debate over the opportunities and constraints of working in the country are shifting once more and may cause some NGOs to leave, even if they are not compelled to do so when their current contracts expire. The cumulative effect on morale of such measures is also likely to be significant. ECHO of course is by far the major funder of the activities of NGOs in DPRK (including the Red Cross), as well as a significant funder of UN agencies.

47. The signals sent to major donors by these events are almost certain to have a negative impact on available funding, even if a reasonable alternative to the CAP can be organized. ECHO itself has foregone any increase in its DPRK budget in response to the cancellation of the CAP.⁵ The DPRK government argues that it requires developmental rather than humanitarian or emergency assistance, and there is certainly a case for this (See Section A4 below). However major sources for developmental funding will remain unavailable unless there is a resolution of the current political crisis centred on the nuclear issue. Moreover the restrictions on access and accountability which have been in force in DPRK for the last decade, even

⁵ An alternative ‘framework for international cooperation’ is already being developed.

though they have eased considerably over the last few years, would almost certainly be unacceptable to any donor considering significant developmental support.

48. By the end of October 2004 the impact of these changes could already be felt, though will have developed further by the time this report is distributed. A major European NGO (Merlin) has had its application to work in the country put on hold by the DPRK authorities. Several visas had been refused to expatriate humanitarian workers, though the reasons as usual were not clear. Evaluation interviews indicated that newly felt restrictions had affected three agencies seriously and eight significantly, with five unaffected. If this were to expand or continue, the impact would become serious.

A3. Emergency response, humanitarian aid and development

49. Throughout the period under review the nature of and rationale for humanitarian assistance to DPRK has generated debate and controversy. There is a broad consensus that humanitarian needs were huge in the mid-1990s, and have improved slowly but steadily since then, with something of a setback in 2002. The evidence of continuing child malnutrition is amongst the clearer and better documented indicators for this.

50. Developments since the economic reforms of 2002 are particularly hard to assess; there is wide-ranging evidence of increased economic activity, but the impact on vulnerable groups remains a cause for concern.

51. At the same time, even before the beginning of the period under review, most humanitarian interventions would have moved on from relief to rehabilitation and development if they were working in countries of similar economic level which had undergone similar natural disasters.

52. This has not happened in DPRK for good reasons. Firstly limits to accountability caused by the restrictions on access and monitoring (discussed in the next section), have caused great difficulties for international agencies, some of whom felt they could not work under these conditions. They have also strained the regulations of most donors. Yet accountability requirements for development funding are much greater than for humanitarian/emergency funding, and would prove fatally incompatible with DPRK restrictions. Secondly almost all major donors have considered development funding politically unacceptable, all the more so since the re-emergence of the nuclear crisis.

53. Yet there has been an obvious desire by donors and implementing agencies alike to move beyond open-ended humanitarian support, exemplified in ECHO's case by the longstanding ongoing and open-ended supply of essential drugs and equipment to hospitals and clinics. Questions inevitably raised are: What is the handover plan? Where is the exit strategy? Are we just helping the DPRK authorities to evade their responsibilities here?

54. These are reasonable questions but the answers can only be that external support remains appropriate until the DPRK authorities have either the means and/or the will

to take over. It will never be possible to know the exact balance between means and will, though it is worth noting that the government states very openly that its priorities lie primarily in the fields of defence and security. It is however very likely that if such assistance were to be withdrawn it would not or could not be substituted and very large numbers of people would suffer as a result.

55. Similar factors apply to other parts of ECHO's programme, particularly in the health sector. Exit will only be possible as and when the DPRK authorities feel able to return to their avowed principles of self-sufficiency; in practice this will probably only be when the economy has made significant progress. Providing open-ended support for running costs may be exceptional, but has logic in DPRK circumstances which we are prepared to accept.

56. The other strategy adopted by donors and agencies, notably including ECHO, is to look for activities that are often part of an emergency response, and where expatriate humanitarian emergency agencies have expertise, but which have a longer term potential impact. This may be seen as blurring the line between relief and development, but is a pragmatic and flexible response to a specific set of circumstances which we fully support.

57. An additional factor in humanitarian work in DPRK is the impact on local people and officials of exposure to expatriates and their agencies, and to new technologies and new ways of working. Though difficult to assess, this is likely to be considerable, considering the situation that existed before.

A4. Monitoring, access and accountability

58. The September 15th statement gave particular emphasis to the monitoring of projects and access to them. In subsequent discussions with FDRC and other government officials it was clear that any expatriate visit to a project outside of Pyongyang was considered to be 'monitoring' and that officials were under pressure to reduce the overall numbers of visits, whatever the actual reason for the visit. Of course project visits have many reasons, e.g. training, technical assistance, supervision etc, as well as monitoring in the stricter sense of checking on progress. Visits may often combine several aspects.

59. The resulting dialogue over 'monitoring', though characteristically limited and difficult, reflected problems that have affected the work of international agencies since they first came to work in the country. Issues of monitoring, access and accountability have always been played out in a unique and difficult environment. In fact as international agencies working in DPRK have increasingly come to terms with this environment, and as the environment before September 15th had been slowly but steadily improving, some may have started to forget quite how exceptional their situation really was even before any changes.

60. Expatriates and citizens alike are unable to move around DPRK without permission. For expatriates such permission generally has to be obtained not less than five to eight days in advance, depending on which day of the week they plan to travel.

Random access to projects and worksites, assumed to be a normal component of international humanitarian assistance, has never been possible in DPRK.

61. Frustration caused by limitations on movement and access, together with related concerns about transparency and accountability, have always been integral to the implementation of international humanitarian assistance in the DPRK. Different agencies, and different individuals within agencies, have reacted to this situation in different ways, in part because such conditions are unlikely to be covered by their handbooks or guidelines or personal experience. Some NGOs decided the situation was unviable and left the country, and others were doubtless deterred from coming in the first place. Those who have remained have decided that the opportunities outweigh the constraints, a viewpoint which ECHO has strongly supported, believing this to be in line with its needs-based approach. UN agencies, with different mandates from NGOs, and overall somewhat better relations with the authorities, have persevered, but they have faced very similar, and very considerable, constraints and frustrations.

62. Together with the inability of agencies to employ local staff, and the variable appropriateness of the skills of counterparts seconded to these agencies by the government, questions of access and accountability have long been a key concern for international agencies. Local staff is provided by the government and can be withdrawn or replaced without notice by the authorities. Yet there have been enormous variations between agencies in the extent of monitoring planned and undertaken.

63. Of the agencies supported by ECHO - the great majority of international agencies working in the country - only two, WFP and the Red Cross, have incorporated into their work programmes a significant number of site visits whose only or primary purpose is monitoring. For other agencies monitoring is generally done as part of site visits whose primary purpose is technical support, supervision, training or capacity building. Compared with UN agencies, most NGOs have a comparatively high ratio of expatriates to projects, and project visits whose primary purposes have been technical support or supervision have generally been adequate for monitoring purposes. UN agencies such as UNICEF and UNFPA, and to a lesser extent WHO, have more extensive programmes and very limited capacity for monitoring. WFP has an even more extensive programme but also many more monitors.

64. Significantly, for both WFP and for the Red Cross, donor requirements have been central to the monitoring regimes they have adopted. For WFP the US government in particular has pushed for extensive monitoring. For the Red Cross ECHO is the primary donor in this regard. In both cases the monitoring regimes established are not particularly cost-effective, and have become increasingly less so once their primary purpose of demonstrating that there is no evidence of systematic diversion of food and drugs has been established.

65. A particular irony of the current situation is that, in the absence of random access, the effectiveness and efficiency of such monitoring is quite limited. At best it can gradually help to corroborate the assumption that food and medicines reach their intended destinations, and that the probability of diversion is low. It can never prove

this, and indeed is never likely to convince harder line sceptics (whose scepticism may have a variety of sources). In any case the primary arguments and evidence against such diversion relate much more to broader assumptions about the nature of DPRK than to evidence gathered by such monitoring.

66. For WFP the extent of this monitoring is very much greater than is normal in other countries where WFP operates, as the DPRK authorities are well aware.⁶ Yet the need for monitoring is driven by the secrecy with which surrounds much of even the most basic empirical data in DPRK. If it were possible, for example, to find out essential information about the social, economic, nutritional, and epidemiological conditions of vulnerable individuals and groups, it would not be necessary for agencies like WFP to try to establish such information themselves, even whilst being denied permission to do so effectively. And even when such information has been obtained, the agency concerned may be reluctant to disseminate it since they are not supposed to have acquired it in the first place - though this emphasis on not risking upsetting the authorities may itself change in the new post September 15th climate. It now appears that security authorities in DPRK have become concerned by the extent to which expatriates are travelling round the country, with WFP generally cited as the main example. Yet if the authorities had a more nuanced approach to deciding what information is sensitive, and a better understanding of the keys required to unlock humanitarian aid there would be much less pressure to undertake some of this monitoring in the first place. At some point in the future there will be an even greater need to understand the keys needed to unlock developmental aid.

67. At the same time most agencies have been less than systematic about finding out information that **is** potentially available. The difficulties of obtaining information can be very real. Nevertheless several expatriates have shown the rewards of spending adequate time on visits and meetings, of good development of personal relationships, of skilful informal fact-finding, and so on, rather than taking the sometimes easier option of the 'tours of inspection' that may seem to fit better with local ways of doing things. Even those who have developed good relationships with counterparts and with local authorities, such as the Red Cross, have not made the most of opportunities to obtain and analyse the types of information that would be invaluable in assessing the impact of their interventions and planning for the future. The collection and analysis of relevant data should generally be given much higher priority, difficult though it may sometimes be.

A5. Counterparts, training, capacity building, and Korean agencies

68. The effectiveness, efficiency and impact of ECHO activities in DPRK is greatly affected by the circumstances surrounding the counterparts seconded to ECHO-supported agencies, as well as by the very limited number of Korean partner agencies.

69. Most international agencies working in DPRK liaise primarily with the Flood Damage and Rehabilitation Committee (FDRC), a government department linked to the Ministry of Foreign Affairs which was set up for the express purpose of such

⁶ As one official said to us: 'For years my country used to give aid to Africa, and we never did any monitoring.'

liaison. The FDRC typically seconds counterparts to international agencies, selected primarily for their language skills. For example, UNICEF has ten Korean counterparts, none of whom has specific technical or sectoral skills. It is not possible for agencies to employ Koreans directly. Counterparts can be withdrawn at any time without any notice, though continuity of secondment has generally improved over the years.

70. Although many counterparts come to learn a great deal about the sectors in which they find themselves working, the training of translators has its limitations as a model for training and capacity building. Nevertheless in some cases the trainers can come to perform a useful role, becoming more than translators when assisting expatriate professionals with their own efforts in training and capacity building.

71. The potential for capacity building is greatly enhanced in the two cases where INGOs are working with Korean agencies. In DPRK there is really no possibility for an agency to work independently of the government, but the DPRK Red Cross has a degree of autonomy in its actions and comes closest to being a local 'NGO' - moreover one with considerable capacity. Its collaboration with the IFRC, now nearly a decade old, has produced exceptional opportunities. IFRC counterparts who also work as translators often have relevant sectoral skills or stay long enough to acquire them. The DPRKRC is also able to employ professional staff and technicians - for example six water engineers - and is linked to a national network. The dividends, though they have taken time to develop, are enormous.

72. The collaboration between Handicap International (HI) and the Korean Association for Supporting the Disabled (KASD) is on a much smaller scale but is equally encouraging (see Section B1.4). Links between Triangle and HelpAge DPRK are at a very early stage and have been less successful⁷. An association dealing with population issues does not appear to be active. These three agencies along with the DPRKRC appear to comprise the entire 'non-governmental' welfare/development sector in DPRK. Small though it is, the sector is of immense potential significance for the future of the country.

73. Despite the limitations mentioned above, training and capacity building should continue to be given priority. Out-of-country training and study tours can be particularly justifiable in circumstances where people have extremely limited exposure to new ideas and methods of working. This is despite the risk that such a counterpart may be moved from his or her job after such exposure, thus reducing the impact of the investment.

A6.ECHO's response

74. ECHO has responded to the unique circumstances and exceptional issues described in this report with considerable imagination and flexibility. We believe that conditions in DPRK mean that ECHO has been right to adopt an active and positive role despite the considerable difficulties, constraints and uncertainties of working in

⁷ By mid-December 2004 they were reported to have improved.

DPRK, and despite working in a long-term context outside the normal framework of ECHO activities.

75. The support for and encouragement of European NGOs has been appropriate, and the support for UN agencies, though more difficult to monitor and assess, has also made sense. We believe the sectors ECHO has supported have also been appropriate, with the exception of some of the interventions in domestic sanitation.

76. ECHO's response has been coherent with and complementary to other EC instruments, except for a certain lack of coherence regarding food aid policy, an issue which we discuss in Section B2.1. Coordination with other humanitarian actors and liaison with member state embassies has been excellent, except perhaps during the very earliest stages of the period under review.⁸

⁸ The evaluation has only been able to assess this in relation to activities within DPRK.

SECTION B: PROJECTS SUPPORTED BY ECHO IN DPRK

B1. Health

B1.1 Distribution of essential drugs and equipment

77. These programmes, managed by UNICEF and by the Red Cross, have comprised a significant part of ECHO's DPRK programme throughout the period under review. A small number of essential drugs are supplied to clinics and Ri (district) hospitals throughout the country, along with a more varied and intermittent supplies of basic equipment.

78. The evaluators find these programmes to be relevant, efficient and effective. Although impact assessment has been almost non-existent - efforts by the Red Cross in this direction had design faults and were never completed - there is every reason to assume that the impact has been very considerable.⁹

79. In Ri hospitals and clinics in the DPRK well over half the prescriptions made are for traditional, mainly herbal, 'koryo' drugs, which are primarily prescribed for treating chronic ailments. Before the emergency of the last decade, other drugs usually referred to as 'modern' or 'Western' drugs were supplied by the Ministry of Public Health. WHO reports no increase in the proportion of drugs supplied by the MoPH in the last two years, and there are some indications that supplies may actually have declined. A new joint venture which aims to resurrect pharmaceutical production in DPRK has not yet started production.

80. The great majority of 'Western' drugs in Ri hospitals and clinics have been supplied by ECHO partners throughout the period under review. An estimated 70% of all basic drugs are supplied by the Red Cross in the four provinces where they have been working. In 2004 they began to work in a fifth province.

81. Elsewhere, i.e. in all other provinces open to international agencies, UNICEF has been the supplier. Here the proportion has varied considerably over the period under review, depending on UNICEF's available funding, but has usually been considerably less than the quantities supplied by the Red Cross. (Recently, as a result of Japanese government funding, this situation has improved significantly, though this is a one-off contribution which may not be repeated).

82. Although both the Red Cross and UNICEF base their programmes on WHO guidelines, both agencies have adjusted these guidelines in line with the funding available to them. The UNICEF drugs package has varied with the availability of funding, sometimes being reduced to as few as six or seven items. The Red Cross packages have been more consistent and more substantial but are still below the level of what is recommended by WHO. These variations and disparities have meant that coverage of the country has been uneven.

⁹ This is essentially a matter of common sense extrapolation. In general this is an unreliable (if over-used) method of impact assessment, but in this case it is reasonable to assume that health indicators would be considerably worse if these essential drugs had been largely unavailable to people.

83. The programme should if possible be expanded to include a full package of essential drugs as recommended under WHO guidelines. Should further ECHO funding become available, this option should be actively pursued.¹⁰ Longstanding efforts should in any case be continued to standardize and rationalize the Red Cross and UNICEF packages as far as possible, whilst recognizing that these disparities are primarily caused by the differential availability of funding. Rationalization between different types of health institutions is also necessary, but will not in itself resolve this problem.

84. The Red Cross has recently started to work in a fifth province where it is taking over from UNICEF. Since the Red Cross has substantially greater resources to devote to monitoring and managing this programme than UNICEF, this process is welcome and should if possible be replicated in further provinces, as indeed has been the intention.

85. There is a need to improve coordination and if possible set up a central database for **all** the international agencies involved with the distribution of drugs and medical supplies in DPRK, i.e. UNICEF, WHO, UNFPA and the Red Cross.

86. Monitoring by the Red Cross has generally been adequate, given the restrictions in force which preclude random access. Several years of monitoring have not revealed any significant problems in relation to drugs reaching their intended destinations. Moreover, if there were any intentional diversion, it would be unlikely to be revealed by the current monitoring regime. The county warehouse monitoring could be reduced substantially, and most of the clinic monitoring could be integrated with other aspects of the programme. At the same time every effort should be made to attempt some informal random access monitoring, which uniquely might have become a possibility for the Red Cross (though this may be less likely post September 15).

87. Monitoring by UNICEF has been very much more limited, and although there is no evidence that the drugs and equipment fail to reach their proper destination, this would merit much more systematic assessment. There is a great disparity between the monitoring of the Red Cross and of UNICEF. It is recommended that an external assessment is made of the distribution and monitoring of the drugs and equipment distributed under UN auspices (i.e. UNICEF, WHO and UNFPA), as well as with the Red Cross, with a view to drawing up new guidelines here.

88. Monitoring is discussed further in Section A5. Issues such as the open-ended support of running costs, exit strategies, etc, which are of particular relevance to these programmes, are discussed in Section A4.

¹⁰ ECHO indicated in November 2004 that were it not for the freezing of the budget following the events of September 15th, this would have been an area where extra funding could indeed have been considered.

Conclusions: distribution of essential drugs and equipment

- This programme is considered relevant, efficient and effective. There are indications that impact is very considerable. Except for closed counties, coverage is nation-wide but uneven, varying with both time and place. Sustainability in this context entails handover to the government, which should eventually be achievable but at an unknown date.
- National coverage has been uneven and has fallen short of WHO guidelines, essentially because of funding limitations.
- Monitoring by the Red Cross has been adequate though could be organized more rationally; monitoring by UNICEF has been limited.

Recommendations: distribution of essential drugs and equipment

- The nature and quantities of drugs and equipment should aim to meet WHO guidelines, if necessary by the identification of additional donors.
- Efforts to standardize and rationalize distribution regimes between the Red Cross and UNICEF should be given higher priority.
- Monitoring regimes should be reviewed and renegotiated. For the Red Cross this should entail less monitoring at county warehouse level, and possibly at health institution level. UNICEF should then attempt to match Red Cross monitoring (as far as finance and government attitudes permit) Greater use should be made of local staff and of cameras.
- A central database should if possible be established for international agencies involved with the distribution of drugs and medical supplies in DPRK, i.e. UNICEF, WHO, UNFPA and the Red Cross. WHO should be encouraged to coordinate this process.

B1.2 Rehabilitation of health institutions and facilities

89. The poor standards of maintenance and hygiene as well as of equipment at most DPRK health institutions provides a case for their rehabilitation, and this is a component of several ECHO-supported initiatives in DPRK. This can be a popular as well as a visible and well understood intervention. The evaluators support these initiatives, which are often dependent on the priorities, circumstances and locations of particular NGOs.

90. The rehabilitation or sometimes the provision of water and sanitation facilities has been the most common intervention, and has generally worked well, though the extent to which sanitation facilities are used at smaller institutions is often uncertain.

91. Winterization, principally through the provision of effective doors and windows has also been considerable, though has been reduced in scale since the problems encountered in 2003, when the DPRK authorities attempted to insist on local purchase despite ECHO's tendering regulations. Doors and windows are generally plastic and are made in China, though some have been bought locally. Where possible, extension of local purchase should be considered as and when this becomes more feasible.

92. Rehabilitation programmes have shown the potential for good cooperation between international agencies, e.g. WHO with Premiere Urgence, WHO with ADRA, PU with CESVI, CESVI with GAA and Concern. HI might have benefited from similar collaboration over their watsan work in Hamhung. Such widespread collaboration and coordination might be encouraged further to allow for institutions to receive a full range of support (IVF, blood, country hospital kit, rehabilitation; or, windows, doors, water and sanitation, etc). Such an approach could not be imposed by ECHO, but could be held up as a mode of improved impact and efficiency.

Children's homes

93. A visit to a baby home in Hamhung raised particular concerns. Boarding institutions for children, particularly provincial baby homes (for 0-4 year-olds) and orphanages (for 4-6 year-olds) are supported by ECHO funds, mainly utilized by UNICEF but also by the Red Cross and to some degree by WFP. This may be through institutional rehabilitation (usually of water and sanitation) or through nutrition programmes and/or food aid.

94. The needs of the babies and children in these institutions are obvious and some of them, notably malnourished babies, are extremely vulnerable indeed. At the same time there are dangers that channelling resources to such institutions runs the risk of inadvertently promoting the institutionalization of children, especially since the overall reasons for institutionalizing children in DPRK are not clearly understood.¹¹

95. It was clear in Hamhung that many of the babies were not orphans but were moved to the home because their parents could not cope with them. Psychological factors were mentioned though not economic ones. Unwanted pregnancy was said not to be a reason. It was clear however that in some cases malnutrition, which was seen to imply lack of parental coping, was itself a factor in the removal of babies to the home - though we were later assured by the Ministry of Public Health in Pyongyang that this is not in line with government policy, under which malnourished infants should be referred to hospital.¹²

96. A policy which was acknowledged by the Ministry but is much more difficult to understand is the apparently routine institutionalization of triplets (in the Hamhung baby home there are four sets) on the stated grounds that their parents will find it difficult to cope with them - even though we were told that the triplets, who were said to see their parents only on their birthdays, are then returned to their parents at the age of four. What exactly this policy of the DPR government implies is unclear, but it

¹¹ Such institutionalization does not appear to be extensive compared for example with what used to be the case in Romania and Albania. The Hamhung baby home was said to be the only one in the province, caring 330 children under five. However the overall situation is unclear as figures are unavailable.

We were told in Hamhung that once institutionalized, children usually remain institutionalized, move to boarding schools from the age of six. However a different baby home director informed ECHO that children were often returned to their parents if circumstances changed, and we were told that this was the case for the triplets we saw. We were also told that some babies were adopted, but this would probably only happen to about 10 of the 330 children in the home.

The Hamhung baby home has recently moved to new premises, enabling it to accommodate almost twice as many babies and children. Although it cannot be proved, it is not unreasonable to suspect that this may be connected with the support it has received from several international agencies.

¹² For a discussion of the treatment of malnourished children see Section 2.2

does indicate that the policies and thinking re institutionalizing children may differ considerably from international norms.

97. The agencies involved with such institutions need to make a concerted effort to establish the policies and practices leading to the institutionalization of babies and children, so that they can begin to assess the impact of their support for such institutions. Staffing and training needs, and carer/child ratios, are also a cause for concern. ECHO should continue to encourage Save the Children to pursue their initiatives in this area.

Conclusions: rehabilitation of health institutions and facilities

- This programme is considered relevant and effective, though efficiency is variable. Impact is probably considerable. Coverage is necessarily limited, and somewhat random. Sustainability is mainly relevant for water and sanitation interventions (see below).
- The reasons for the institutionalization of babies and children are not clear. There is a danger that support for such institutions could inadvertently promote institutionalization.

Recommendations: rehabilitation of health institutions and facilities

- Cooperation between agencies should continue to be encouraged, with a view to promoting coordinated rehabilitation where possible.
- Serious efforts should be made to establish the reasons for the institutionalization of babies and children. This will involve some individuals spending significant time on getting to know some institutions well.

B1.3 Reproductive health and safe delivery

98. Although current figures are unobtainable and short term trends are uncertain, there is little doubt that the long term humanitarian emergency affecting DPRK has caused a dramatic increase in maternal mortality. A reproductive health survey carried out by UNFPA in 1997 indicated that maternal mortality rose from 54 per 100,000 live births in 1993 to 105 per 100,000 live births in 1997¹³. Many authorities believe these figures may be a serious underestimate.¹⁴ The case for support and intervention in this area seems clear.

99. Research suggests that providing professional delivery care is the most effective way of decreasing maternal mortality¹⁵. With ECHO funding in 2003 UNFPA is helping to increase the level of professional care available to pregnant women in DPRK by the training of trainers at provincial level and by further training of clinic staff at the Ri (district) level, as well as by providing basic delivery kits to 200 Ri clinics nationwide. The provision of contraceptives can also be an important

¹³ UNICEF. Analysis of the situation of children and women in the Democratic People's Republic of Korea. UNICEF, DPRK. October 2003.

¹⁴ Evaluation interview with WHO.

¹⁵ Ronsmans, C. Maternal Mortality in Developing Countries. In: Nutrition and Health in Developing Countries, Semba & Bloem eds. Humana Press, New Jersey USA. 2001.

component of maintaining maternal health¹⁶. As there are no other international organizations focusing on women's health and maternal mortality in DPRK, this work is particularly relevant.

100. UNFPA has been spread thinly in terms of both implementation and monitoring. Although the plan to cover 200 Ri clinics was justified, it would have been better to focus on the areas where UNFPA was implementing the rest of its programme, i.e. in three provinces rather than in six provinces and two cities. This geographical spread has not allowed UNFPA to cover all of the Ri clinics in any of the provinces or cities, increasing monitoring difficulties and possibly decreasing impact. UNFPA's Evaluation Report of the ECHO funding (Sept, 2004) also documented discrepancies in the supplies received at some of the clinics. For example, supplies were sometimes retained by a county hospital rather than sent on to Ri clinics. Transport difficulties may well be the cause of this problem.

101. UNFPA estimate that they have visited approximately 50 clinics and expect to have photographic evidence (using disposable cameras) showing the arrival of supplies at a further 50. Such photographic testimony is imaginative and the overall level of monitoring is acceptable if properly recorded and analysed. The project appears to have been satisfactorily implemented despite UNFPA's staffing limitations. Future projects funded by ECHO should however be targeted at the provinces in which UNFPA carries out their country programme. This will not only facilitate monitoring but will also ensure that efforts to improve maternal health and obstetric care are complementary, thereby increasing the potential impact of the interventions. In addition it will ease programme management for UNFPA, as well as a being a more efficient use of both human and material resources.

102. UNFPA has negotiated an agreement entitled "Standard Operation Procedures for the Logistic Management of UNFPA Supply and Warehouse" with the Central Medical Store/MOPH and the National Coordinating Committee for UNFPA/DPRK to ensure that their supplies have adequate space in the warehouses and that their shipments are properly recorded. This is the only agreement of its type and is a good example of collaboration with government.

103. Given the supply delivery nature of the project, it faces the same sustainability issues as many other ECHO programmes in DPRK. Although some of the equipment provided (e.g. autoclaves) can have a long-lasting effect far beyond the life of the project, consumables such as drugs and contraceptives will require constant replenishment.

104. UNFPA also provides essential drugs to the clinics they support, and although the evaluators did not come across direct evidence of overlap or duplication with other organizations, this has happened elsewhere (UNICEF/Red Cross). With four organizations involved in such drug supply the need for improved coordination and if possible a centralized database maintained by a lead agency is clear.

¹⁶ UNFPA website: www.unfpa.org

Conclusions: Reproductive Health and Safe Delivery

- This programme was found to be very relevant, and adequately effective and efficient. Impact was probably good. Coverage was somewhat overextended. Sustainability in this context entails handover to the government or to an alternative donor, which should eventually be achievable but at an unknown date.
- UNFPA was spread thinly, in terms of human resources but overall implementation was satisfactory.
- Although no direct evidence of overlap was observed, the fact that there are four separate agencies (UNICEF, IFRC, UNFPA and WHO) providing essential drugs may cause confusion.

Recommendations: Reproductive Health and Safe Delivery

- Further UNFPA projects should be concentrated on provinces where they carry out their national programme, increasing efficiency and effectiveness.
- A common database of institutions that have received support in terms of drugs and other equipment is necessary to ensure there is no overlap. It will also facilitate monitoring.

B1.4 Intravenous fluid (IVF) production and Blood Bank(s)

105. These programmes comprise a different type of rehabilitation involving more sophisticated technology. The blood bank is a programme implemented by WHO and the intravenous fluid (IVF) programme is implemented by Premier Urgence (PU). Both projects have been in operation since 2002 and include not only equipment and supplies but also infrastructure rehabilitation for the buildings housing the laboratories and training or technical support centres.

106. The IVF programme in particular is particularly popular with the Korean authorities at both central and provincial levels, and was frequently cited as an example of the type of technology exchange and support that is needed. In the overall context of DPRK, and in view of the ambivalent response of authorities to some of the interventions of international agencies, this boost to the reputation of ECHO and its partners should be seen as very positive - even if the reasons for it, i.e. that the interventions are of a high tech variety, are more debatable.

107. These projects require continuous training and capacity building, which WHO has addressed by developing a relationship with the National Blood Centre in Bangkok, run by the Thai Red Cross Society. This partnership has provided the blood banks in DPRK with annual technical training as well as an annual evaluation of activities by experts from the National Blood Centre. PU is creating a troubleshooting manual based on examples of the technical problems which they have had to solve already, so that institutions can be slightly more independent from them.

108. WHO and PU have collaborated on different projects, with PU providing technical support in terms of engineering (e.g. electrical wiring) for some of the infrastructure that WHO has been rehabilitating. Most recently they are considering

working in the same hospital, providing both the IVF equipment and upgrading the blood bank. This is a good use of resources and an approach that should be encouraged, as putting both programmes in one place has the potential to increase their effectiveness. However, it is debatable whether this should be implemented in the provincial hospital in Chongjin given the logistical constraints involved in working there, i.e. the time involved in travelling there from Pyongyang and its inaccessibility during winter.

109. There has been a longstanding debate between advocates of a centralized system for both IVF and blood banks (e.g. WHO) and advocates of a more decentralized approach (e.g. PU) - though the PU approach is less decentralized than the existing system where most hospitals produce their own IVF. It is true that efficient transportation remains a problem in DPRK even when the product is comparatively transportable. However there are real potential problems in the long term in maintaining comparatively high technology equipment at a regional level - especially if and when PU leaves the country. Some though not all the hospitals with PU IVF units are now supplying neighbouring health institutions, though it has been impossible for PU to establish the extent of this. Certainly local and regional distribution is crucial to the impact of the project and needs to be pushed for constantly.

110. The blood bank in Pyongyang was visited and seen to be completed and functioning. Although there is still a need to increase the number of donors, particularly men, lack of donors should not be a limiting factor, and all the requirements for blood for the hospitals in the Pyongyang area should be met.

111. The main concern with regard to both the IVF and blood bank programmes relates to their sustainability. There are two aspects to this - financial and technological. Questions of financial sustainability are similar to other cases where ECHO has been supporting open-ended ongoing costs, notably for example in the essential drugs programme (qv).

112. The largest recurring costs here are the disposable bags that are used to store the blood and IVFs. Currently these are imported at significant expense. Both WHO and PU are looking into options which include financing the bags from another source, receiving them as in-kind support from another donor, and/or identifying cheaper products. Raw materials, other consumables and spare parts also require external finance and procurement. PU and WHO, as well as ECHO, are aware of the need to find a long-term solution to this, in coordination with each other.

113. The maintenance and repair of equipment over the long term also needs to be addressed if these projects are to prove sustainable. This is particularly true for the PU IVF units, since the hospitals have neither the finance nor the capacity to obtain supplies and spare parts for the machinery without PU assistance, which cannot be guaranteed indefinitely. Technical support is also likely to be needed for several years. Plans need to be made to ensure long-term technical oversight as well as financial support; one option might be for WHO to assume greater responsibility here.

114. Any assessment of the impact of the ECHO-funded IVF programme would also have to assess the system it aims to replace. The overwhelming proportion of IVF

fluid produced in DPRK is manufactured locally in hospitals, using antiquated technology, usually including storage in sterilized beer bottles. The assumption is that this system is inefficient, ineffective, unhygienic and unsafe. The assumption may be true, but there never appears to have been any attempt to test it out. We were told that the IVF produced is usually adequate, but loses sterility within 48 hours because the bottles are inadequately sealed. If so, the time between production and use is clearly critical, as is the method of sealing the bottles (actual or potential). We recommend that this whole situation should be properly investigated, and considerations should be given to ways in which the traditional system could be upgraded, since the people of DPRK will be very largely dependent on it for the foreseeable future.

Conclusions: Intravenous fluid (IVF) production and Blood Bank(s)

- Both programmes are believed to be efficient and effective, though it is not known how the IVF programme compares with existing alternatives, making its relevance also uncertain. Coverage and impact are limited. Sustainability appears to be a problem, particularly for the IVF programme, from both financial and technological perspectives.
- Both programmes are well implemented, meet definite needs, and are popular with the Korean authorities.

Recommendations: Intravenous fluid (IVF) production and Blood Bank(s)

- WHO and PU should continue to be encouraged to find a joint solution to alternative ways of financing the disposable bags.
- Developing ways of reaching more institutions with the PU IVF laboratories that are already functioning is a priority. This will involve putting pressure on hospital directors.
- A long term plan needs to be discussed particularly for IVF (ECHO being sole funding source) which could include the possible involvement of WHO.
- Existing IVF production units should be carefully assessed, with a view to seeing whether strategic improvements can be found.

B1.5 Work in support of the handicapped

115. The partnership between Handicap International (HI) and the Korean Association for Supporting the Disabled (KASD) is a rare example of collaboration between an international and a national agency. It only bears comparison with the relationship between the IFRC and the DPRKRC, albeit on a much smaller scale. HI has placed great emphasis on this partnership, delaying their entry into DPRK until persuaded that KASD had enough capacity to work as a partner agency. As discussed in section A6 the significance of such collaboration in DPRK circumstances is enormous. Possibilities for collaboration have recently increased as KASD becomes able to work with other disabled groups such as the deaf and blind, whose institutions expatriates have recently been allowed to visit.

116. The official opening of HI's prosthetic workshop in Hamhung took place shortly after the evaluation visit, but production was already well under way. The buildings (prosthetics workshop and physiotherapy/consulting rooms) are bright and provide

adequate space for activities. The evaluators support the work of the prosthetic workshop; however there are some concerns regarding sustainability. The workshop does provide much-needed and up-to-date treatments but the fact remains that these prosthetics will require renewal every 2 – 3 years (or six months in the case of children). There is a need to develop a strategy for long-term support for the programme, particularly as ECHO remains the sole funding source.

117. The HI programme has included rehabilitation of the buildings and some equipment support (beds, stoves, etc.) to the Provincial Orthopaedic Hospital in Hamhung, located very near the workshop. The main objective of this support is the prevention of more disability through the improvement of facilities, ensuring that people receive better care. However, there is no feasible way of measuring the impact of this and whether this objective has been achieved since HI have only limited access to the hospital. Although HI's support to the hospital is obvious, much-needed and well-received, this has not proceeded to improve the number of new amputees that are referred to the workshop (the number of new amputees remains low). Unfortunately, there appears to be almost no coordination between the workshop and the hospital, almost certainly because they come under different ministries, which are typically organized on vertical lines without horizontal linkages.

118. The water supply system installed in the hospital, and other improvements to the infrastructure, though functional, are of lower standard than the facilities connected with the workshop, and indeed than most ECHO-supported installations in DPRK. It is understandable that HI has limited influence over how things are carried out in the hospital, but it is recommended that technical support from other international organizations with expertise in water and/or infrastructure rehabilitation be sought when possible, and/or that HI logistics staff have oversight as with the workshop construction.

119. HI is considering the rehabilitation of the dormitory which patients use when visiting either the government factory or the HI workshop. The need for improved sanitation and winterisation of the building is clear, and might extend the use of the building in winter, as well as helping to ensure that patients stay the required period for physiotherapy. This proposal is supported, provided adequate technical oversight is provided for construction and watsan work.

120. As with other partners, HI finds that the short turn around for ECHO grants limits some of their longer-term needs such as providing training for technicians and physiotherapy assistants, which could take up to two years and hence cannot be included in an ECHO project. At the same time, interest from other donors for more development oriented work which would include components such as this training is limited.

Conclusions: Work in support of the handicapped

- The programme is relevant, effective and efficient. Sustainability is uncertain because a) prostheses require renewal every 2 – 3 years and b) ECHO is the sole funding source of this programme. Impact is too early to assess.
- The rehabilitation work carried out in the orthopaedic hospital was of lower quality than the workshop.

- The relationship between HI and KASD is developing into a model for Korean / international organization cooperation, providing an example of institutional capacity building.

Recommendations: Work in support of the handicapped

- Efforts should be made to secure funding in the long term by attracting additional or alternative donors.
- HI should ensure rehabilitation initiatives have adequate technical support.
- HI's interest in rehabilitating the dormitory in Hamhung is supported.
- The relationship between KASD and HI should if possible be used as a model for collaboration between international and Korean organizations.

B2. Food aid and nutrition

121. Although considered in the same section of this report, the analysis presented below shows that the connections between food aid, food security and nutrition are in fact by no means straightforward.

B2.1 Food Aid

122. Analysis of overall food aid to DPRK in recent years shows that political rather than humanitarian factors are the primary reason for variations in donor contributions, especially for major donors such as the USA, Japan, and the Republic of Korea. ECHO, though not in itself a major player, is to be congratulated for its efforts to compensate for this by prioritizing humanitarian rather than political grounds in its interventions.

123. Most EU food aid to DPRK has been provided under food security budget lines rather than by ECHO. The evaluation learned a good deal about the different and disparate approaches of ECHO and FSU. However since this was not strictly part of our mandate we do not attempt to describe these approaches in any detail; instead we hope that the analysis presented here will contribute to the policy debate within the Commission.

124. Efforts to determine the existence and extent of the 'food gap'¹⁷ in any given country depend on the range and reliability of available information. Assessment of food aid needs requires a variety of information, including macro- and microeconomic data, crop surveys, and more specific assessments such as household food economy and nutrition surveys.

125. In DPRK, the food gap has officially been determined by the annual crop assessment and the national nutrition surveys (1998, 2002 and 2004 – results forthcoming in early 2005). Both of these are important; the former provides an indication of the possible food needs and the latter provides an indication of the severity of the situation, in terms of how it could be affecting the most vulnerable

¹⁷ i.e. the difference between food produced and imported commercially, and the food required to feed the population adequately

members of the population i.e. young children and their mothers. However an accurate picture should include information on household economy, market prices, food distribution within the family, dietary intake, and the effective purchasing power of the most vulnerable. Without such information it is impossible to have an accurate picture of needs and it is necessary to make estimates based on extrapolation from limited and possibly unreliable data.

126. Uncertainties about the extent of the 'food gap' are compounded by uncertainties about the extent of food aid, since food aid from China is not made public and is invariably the subject of considerable speculation.¹⁸

127. The methodological limitations of crop assessments are widely recognized. As in many other countries, the crop assessment in DPRK is largely based on figures provided by the government. In DPRK there is limited information available and what is available should be treated with caution. Crop assessments are usually carried out by the national government, FAO and WFP. Each of these partners has a separate mandate within the assessment; the government facilitates the process and FAO provides technical assistance to carry out an economic analysis and determination of food production/balance estimates, while WFP and FAO jointly carry out a vulnerability analysis. Information required for a crop assessment includes national economic data such as per capita or household incomes, employment and livelihood dependence on agriculture, and crop production estimation, all on a national basis (FAO/GIEWS, 2004)¹⁹. Uncertainties surrounding such information are reflected in the findings of the crop assessment.

128. Vulnerability analysis crucially depends on data obtained at a local level. A good deal of this has been collected informally and/or unofficially by WFP in the course of its extensive monitoring programme, though much of it remains unanalysed. Moreover because of the sensitivity surrounding all such information in DPRK, WFP has felt unable to publish this information or even to share it with other humanitarian agencies - though reassurances about its existence have doubtless been welcome to donors. There are indications that in the new situation post September 15th WFP may be less constrained; certainly the wider dissemination of such information would be invaluable to others working in the field.

129. Nutrition surveys are an important part of the food needs picture but have the limitation of presenting only the effect of deteriorating or improving conditions and do not necessarily provide insight into the underlying causes of malnutrition, unless they are expressly designed to do so. High malnutrition rates, contrary to intuitive assumptions, may not respond to high inputs of food and may be related to other causes such as lack of adequate water and sanitation or appropriate health services. The basic determinants of nutrition such as the quantity and quality of resources (human, economic and organizational) and the way these are controlled also play a role in determining malnutrition. The quality as well as the quantity of food affects the nutritional status of children, but may not provide a direct causal link. This will need to be borne in mind when the nutrition survey undertaken in October 2004 is published in 2005.

¹⁸ There have also been some reported uncertainties about RoK food aid.

¹⁹ Overview of Methodology on Crop and Food Supply Assessments. Presentation prepared by: Global Early Warning System (GIEWS) on Food and Agriculture and FAO. Rome, Italy. March 2004.

130. ECHO provided support to WFP in 2002 and 2003 when other major donors decreased their contributions because of broader political considerations. The evaluators strongly support this approach, believing it to be in line with ECHO's humanitarian mandate. This is despite the uncertainties in assessing this situation as outlined above.

131. WFP's efforts to provide support on a needs basis has undoubtedly improved the effectiveness and efficiency of their programme, and should have helped to ensure that the most vulnerable groups of the population (i.e. young children and pregnant/lactating women) do not suffer from decreased rations even when the overall amount of food available for distribution fluctuates, for example because major donors have cut back food aid. ECHO's role in filling in some of the 'food gap' in these circumstances has been particularly valuable, since its support is thereby directed to the most vulnerable groups.

132. Indeed there are some particularly positive aspects to the food aid programme that are almost unique to DPRK. These include the implementation of the targeting system through institutions such as nurseries, and kindergartens and the local production of fortified food. The targeting system, based on data made available by the government, provides WFP with a picture of the groups that require food aid, though not complete beneficiary lists. The division of beneficiaries into groups also allows for the adjustment of coverage depending on funding availability, and the centralized system makes it possible to assume that most children will attend nurseries and kindergartens. Providing (fortified) food through these channels should ensure that assistance reaches child beneficiaries in particular.

133. If economic reform and progress takes off, WFP may find it more difficult to justify the need for food aid in the near future, whether or not the position of vulnerable groups actually improves. (Newly vulnerable groups are likely to be urban and may include the elderly.) Providing data on the access to food of vulnerable groups is more important than calculating the national food gap and the continuation of WFP's programme will in part depend on their ability to persuade donors of this.

Conclusions: Food aid

- The relevance, effectiveness, efficiency and impact of ECHO food aid appear to have been considerable, though this is very difficult to assess. Coverage appears to have been well focused. In helping to offset a sudden drop in food aid in 2002/3, ECHO can be said to have contributed to a more sustained supply.
- Calculation of the 'food gap' and of food aid requirements is an exceptionally approximate process in DPRK
- Nutrition surveys are a useful tool but have limitations in illustrating the underlying causes of malnutrition, which may not be related to a lack of food.
- The food aid programme in DPRK has some unique positive points such as the apparent ability to target vulnerable groups and the national provision of fortified food.
- Even if the overall need for food aid declines because of changing economic circumstances, access to food may simultaneously deteriorate for vulnerable sections of the population.

Recommendations: Food aid

- ECHO's approach of providing funding to WFP when needed to fill gaps and so helping to ensure that the most vulnerable groups (young children and pregnant/lactating women) receive food is supported.
- WFP should analyse and make available the data they have collected through their monitoring systems as a matter of priority.
- As the access to food becomes more important than its overall availability, the identification of new vulnerable groups and programming to reach them should be a priority.²⁰

B2.2 Nutrition

134. ECHO's support to UNICEF in nutrition includes a wide range of inputs, from micronutrient premix for the local production of fortified food to F-100 therapeutic milk, micronutrient supplements and other IEC (Information, Education, Communication) support. Currently UNICEF is ECHO's only nutrition partner in DPRK. However given the very poor status of infant nutrition revealed in national surveys, nutrition is a major concern.

135. Although the number of severely malnourished children in DPRK remains uncertain, severe malnutrition undoubtedly exists. National DPRK policy dictates that malnourished children should be treated in paediatric wards of hospitals where they can receive adequate care. Such a policy appears reasonable as severe malnutrition is a medical condition that requires highly technical and skilled care, without which young children run a high risk of dying. However, as has been the experience in other countries, medical staff (e.g. doctors) are not usually trained in the proper protocols for treating severely malnourished children. As with so much in DPRK, little is really known about the appropriateness of treatment given to malnourished children in the country's hospitals, or indeed in other institutions.

136. Standard international protocols for the treatment of severe malnutrition (WHO, 1999)²¹ were created to ensure that severely malnourished individuals receive standard care that is based on solid scientific evidence and ensures proper rehabilitation and recovery. In a context like DPRK where the per capita number of doctors is high (568 per 100,000²²) and illiteracy is not a problem there are certain advantages that are not present in other countries. There are also some distinct problems such as the centralized system and the difficulties of engaging with authorities. Additionally there are almost certainly problems with the continuity of monitoring and supervision of malnourished children in hospitals (though the evaluation was not in a position to investigate this). However, these challenges should not undermine the importance of implementing the standard protocols. If

²⁰ These are effectively recommendations to WFP, but ECHO should use its influence or powers of persuasion to promote their implementation.

²¹ WHO. Management of severe malnutrition: a manual for physicians and senior health workers. Geneva, Switzerland. 1999.

²² UNICEF. Analysis of the situation of children and women in the Democratic People's Republic of Korea. UNICEF, DPRK. October 2003.

malnourished children are to have a chance of surviving and attaining a full recovery, the implementation of these standards is vital. UNICEF has focused on advocating for these standards at a central level. Such advocacy work is indeed a priority but there is scope for expanding practical work in order to address the needs of individual children who are already malnourished and require immediate attention.

137. Therapeutic milk (F-100) is used for the rehabilitation of severely malnourished children, particularly those aged between 6 – 59 months. UNICEF's programme, funded by ECHO, includes the provision of F-100. In the proposal for the 2003/2004 programme (ECHO/PRK/210/2003/1003), F-100 was to be distributed to 3 provincial paediatric hospitals. However, during monitoring visits in Nov 2003, ECHO's T.A. found evidence that F-100 was also being distributed to baby-homes (Hyesan and Chongjin). In the proposal for the 2004/2005 programme (ECHO/PRK/BUD/2004/01010) F-100 was to be distributed to 157 rehabilitation centres including 12 paediatric hospitals, 13 baby-homes and 132 county/city hospitals. This was an enormous change which the documentation fails to justify, and needs to be reviewed urgently

138. F-100 is a medicinal product and if not used properly can cause more harm than good, particularly when used by untrained staff and without following established protocols. During the evaluators' field visit to the Hamhung baby-home it was clear that malnourished children were also being cared for there. The Director told the evaluators that when a malnourished child does not have someone to accompany them they are not taken to the hospital, but are cared for in the baby-home instead. At a subsequent meeting with the Ministry of Public Health in Pyongyang the policy of hospitalizing malnourished children was confirmed and we received an undertaking that the situation would be looked into.

139. F-100 was also being used at the baby home and at the city clinic in Hamhung as a milk substitute to feed non-malnourished children. The monitoring report from ECHO's T.A. (Nov 2003) addresses this issue. F-100 is not recommended to be used as a milk substitute for children 6 – 24 months of age. There are other more appropriate and cost-effective milk sources for the non-breastfed young child such as: a) full cream milk (goat, buffalo, cow, sheep, camel milk, and UHT), b) evaporated milk (reconstituted), c) fermented milk, and d) expressed breast milk (heat-treated if HIV positive)²³. Since these different options exist there is no justification for continuing to provide F-100 in such large quantities and to so many institutions. Not only is its provision a departure from standard recommendations it also decreases significantly the cost-effectiveness of the programme. The evaluators recommend that this component be revised and proper milk sources be provided for this age group.

140. More serious is the possibility that F-100 could be fed to babies. F-100 is not designed for infants under six months of age (malnourished or not) and when prepared following the instructions on the package has high levels of sodium, protein, lactose and solutes that would cause dehydration and would be dangerous for such a young infant²⁴. The IFE Core Group does state that a diluted (one third extra water) preparation on F-100 (F-100D) can be safely used for initial re-feeding if appetite

²³ Infant Feeding in Emergencies Core Group (ENN, IBFAN, Terre des Hommes, UNICEF, UNHCR, WHO, WFP). Module 2 for health and nutrition workers in emergency situations. *In press*.

²⁴ *ibid*.

appears to be reasonable and is also suitable for catch-up growth²⁵. However such information will not be known in DPRK. We have no direct evidence that 0-6 month infants are being given F-100, but it seems very possible that it may be being given to both malnourished and adequately nourished infants. The situation requires urgent investigation and attention.

141. In these circumstances the provision of infant formula is warranted, particularly in institutions like the baby-homes where breastfeeding is not an option. International guidelines exist for the procurement of infant formula. It should be generic formula (i.e. not commercial), industrially produced following Codex Alimentarius standards, procured through normal channels (i.e. not donated) and used following the International Code of Marketing Breast-Milk Substitutes²⁶.

142. ECHO's support of micronutrient premix through UNICEF and WFP is a good component of nutrition programming, with high impact given that the fortified foods produced with the premix are distributed almost nationwide and that no other fortified foods are produced in the country. Four different fortified products are produced: cereal milk blend (CMB), rice milk blend (RMB), corn-soy blend (CSB) and noodles. Biscuits are also produced in the WFP factories; at the time of the evaluation these were no longer being fortified but fortification may resume. The fortified food produced could provide children with approximately 100% of the requirements for some vitamins and minerals, and pregnant or lactating women with about one third of requirements. UNICEF has reported some increase in the use of supplements (iron and folic acid) by pregnant women, contributing to an increase in the level of requirements that are met; however it is important to continue advocating for this at central and local levels. The use of iron supplements is also something that can be cross checked from the essential drugs programme as ferrous sulphate is distributed by the IFRC as well.

143. Opportunities to try to measure the impact of the provision of premix and fortified foods should be pursued where possible. The recent nutrition survey was an ideal opportunity; the questionnaire apparently only included some limited questions on food frequency, haemoglobin measurement (woman of the household only) and household salt iodisation testing. It was not clear why the prevalence of goitre was not included, or a physical examination of the child to determine the presence of other micronutrient deficiencies such as vitamin D (rickets) and A (Bitots spots). As UNICEF moves towards providing iodised salt on a national scale, baseline information on goitre levels would have been useful for measuring the impact of this intervention. Although physical evidence of micronutrient deficiencies such as rickets or Bitots spots are usually very rare, making them a hard indicator to collect in normal localised surveys, on a national scale it could provide some useful information.

144. As with many other partners, UNICEF reported some constraints regarding the short timeframe of the ECHO grants, and related problems of supplies arriving on time. They have been able to work within this timeframe however by keeping stocks on hand that can be distributed shortly after that grant has been signed, without having to wait for supplies to arrive through their regular procurement channels.

²⁵ *ibid.*

²⁶ *ibid.*

145. Another reported constraint refers to transport, particularly with regard to the RMB and other commodities destined for child institutions and provided at a provincial level. Provincial authorities are responsible for arranging to collect the commodities and transporting them to the institutions within their catchments. Although WFP is committed to support institutions such as baby-homes with 100% of the rations required, during the field visit to the baby-home in Hamhung, the evaluators were told that they only received WFP food when they put in a request to the local People's Committee to collect it for them. Given that quantities may be relatively small and fuel is scarce, it is important that partners (i.e. WFP, UNICEF, etc.) coordinate available transport and possibly support the authorities where necessary to ensure that institutions receive all the commodities they need. The evaluators were also told that this is currently being done where possible and that commodities like the RMB may actually be delivered with the drug supplies to ensure that they reach institutions in a timely manner.²⁷

146. For effective nutrition programming in DPRK, there is a strong case for strengthening interventions at a local level. UNICEF has started to move in this direction by concentrating programming efforts on three focus counties (shortly expanding to six) and implementing an integrated programme that includes: a) quality care, b) growth monitoring and development monitoring, c) upgrading of physical facilities (including: toilets, drinking water, heating system, flooring, windows, doors, kitchen), d) participation of local authorities and parents, and e) provision of adequate food (including: adequacy, frequency, positive feeding, special feeding during illness).

147. International NGOs with expertise in nutrition, notably Save the Children, would be well placed to implement such programmes, in coordination with UNICEF by expanding support at a local and provincial level. If a significant impact is to be made in addressing malnutrition, particularly severe malnutrition, then more emphasis should be placed on increasing direct implementation capacity. Intensive technical training and support is required for Korean health workers adequately to implement nutritional rehabilitation.

Conclusions: Nutrition

- The programme is relevant, but its efficiency and effectiveness varies across different components, with severe malnutrition requiring the most urgent attention. Sustainability in this context entails handover to the government or to an alternative donor, which should eventually be achievable but at an unknown date. Some indications of impact should be revealed by the results of the national nutrition survey in early 2005, though it will be difficult to know what can be attributed to the interventions of international agencies..
- ECHO could have benefited from some expert input on nutrition programming design and implementation.
- There is only very limited implementation of nutrition programmes at a local level in DPRK.

²⁷ ECHO is aware of this problem, which is under discussion with partners.

- Protocols for the treatment of severe malnutrition are not being adequately implemented, leading to decreased impact on reducing severe malnutrition and lower chances of recovery and survival for severely malnourished children.
- F100 is being extensively used to feed non-malnourished children, which is inappropriate and is not cost effective.
- Use of F100 for infants (under 6 months) is dangerous and measures should be in place to prevent this.
- Support to micronutrient premix is a strong component of the programme with potential to reach many vulnerable children
- Lack of transport prevents some institutions (e.g. baby homes) from receiving food from WFP particularly as the quantities are usually small.

Recommendations: Nutrition

- Technical assistance on nutrition should be sought, particularly at the time that proposals are being reviewed, or to review particular reports.
- Implementation at a local level to meet immediate needs should be promoted, along with an expansion of appropriate INGO partners.
- The comparative ability of hospitals, baby homes and orphanages to manage malnourished babies and children should be assessed. The provision of F100 to 157 institutions should be reviewed and revised in the light of these findings, and should bear in mind the MoPH policy that malnourished children should be treated in hospitals.
- The implementation of standard international protocols for treating severe malnutrition is a priority.
- Infant formula should be provided to infants in baby homes.
- In future, proper milk sources (not F100) should be provided to children aged 6 – 24 months who are not malnourished.
- ECHO should encourage the inclusion of more questions/measurements about micronutrient deficiencies in the next national nutrition survey.
- Food transport to institutions such as the baby home or orphanages should be coordinated where possible to ensure that there are no shortfalls.

B3. Water and sanitation

B3.1 Drinking water supply

148. All of the twelve water supply projects visited by the evaluation team were essentially viable and delivered adequate quantities of water to beneficiaries. Some had technical weaknesses though these were never fundamental. All projects involving pumps raised questions of sustainability. From discussions held and documentation studied there did not appear to be any ECHO-supported projects which had failed during the period under review, or were heading for failure. Although impact in terms of improved community health has been difficult to assess, still less to quantify, improved disease profiles are invariably claimed by local health institutions,

and in a few cases this has been more systematically demonstrated. Other benefits such as reduction in time and effort taken by women and children fetching water are sometimes easily demonstrable.

149. ECHO began supporting drinking water supply projects through all its current partners in 2002, though some (Red Cross, Concern and CESVI) were already working in this field. All these agencies have learnt a good deal from their experiences to date. Most of them have reduced the planned size of their interventions in order to fit better with their own capacity and with the capacity of their local counterparts and partners. The international agencies discovered that materials available within the country were almost invariably of insufficient quality and/or were the wrong specification to meet adequate standards in water infrastructure construction. Yet the knowledge of local engineers and technicians about more modern imported materials was at first almost negligible. Consequently technical support has become an important component of the programmes and of their efforts to ensure acceptable quality and sustainability for the installations.

Gravity-based and pump-based systems

150. Where feasible most ECHO partners have been able to focus on the construction of gravity-based systems, so avoiding problems associated with pump-based systems. Such gravity systems are inherently more sustainable, and are also almost certain to be more efficient and effective. Their drawbacks are that they can only be installed in suitable terrain (widely but not universally available in DPRK) and are not always initially popular with local officials more familiar with traditional pump-based systems, though successful gravity based systems quickly change this prejudice.

151. Maintenance and repair of pumps in DPRK can often be a problem, especially difficulties around the purchase and procurement of spare parts, whether the pump is locally produced or imported. This can have serious implications for the sustainability of such interventions. Fluctuations and discontinuities in electricity supply can accelerate the deterioration of pumps, particularly imported pumps that may not be designed to cope with this. Empty pipes, often the consequence of power cuts, are also more susceptible to entry from contaminants. Apparent improvements in electricity supplies over the last year have improved the effectiveness of pumped systems, without significantly affecting such disadvantages.

Water quality

152. Although it is generally very difficult for international organizations to obtain reliable information on water quality, it is clear from observation and from epidemiological changes (in the few cases where this has been adequately monitored) that provision of safe drinking water has a very significant and positive impact - as common sense extrapolation would also suggest. Safe drinking water is also seen as an important priority by local and national authorities as well as by international agencies - a key factor for the potential effectiveness and replicability of developing such supplies.

153. Water quality indicators may not be adequately measured (if at all), and results are rarely made available to international agencies. Although it is therefore impossible to be absolutely certain about quality, or to ensure compliance with WHO guidelines, it can often be reasonably deduced that water supplied under such systems is safe, or at the very least is a great improvement on what was previously available.

Some factors influencing the development of water projects

154. Initially, the ECHO-funded water projects were primarily oriented towards the rehabilitation of physical infrastructure, where needs were clear and technical problems generally manageable. It was often unclear what local technical skills were available, and with some limited exceptions - most notably within the Red Cross, and recently Triangle - the counterparts seconded by the authorities to work with international agencies lacked technical qualifications, working primarily as translators. Over time NGOs working in the sector managed to increase expatriate technical input and staffing by way of compensation. In the absence of technically qualified counterparts, most training and technical support took place with local technicians on site.

155. Nevertheless over time the development of cooperation between international agencies and the Korean counterparts and technicians with whom they have been working has led to a growing potential for designing and implementing new water supply systems. Assessment and design processes have become increasingly interactive between such partners, and the quality of assessments, designs, maps and drawings has improved considerably over the review period, as has workmanship and local pride in the systems constructed. (This has been easiest to track through the Red Cross, whose water supply projects predate ECHO funding, though has also happened elsewhere.) New approaches, notably an emphasis on spring catchment development and complete gravity systems, have become increasingly accepted and appreciated. In pursuit of sustainability, quality has generally improved, though often at the expense of population coverage.

156. These trends apply to the NGOs implementing water projects. UNICEF has followed a different course, continuing to emphasize coverage and cost-efficiency, and relying very largely on the Ministry of City Management to supervise and implement the work. Completions of projects involve "signing-off" on different technical components with limited possibilities for verification. Although all UNICEF projects appear to have been successful, more limited monitoring has made this more difficult to establish. Additional funding from DFID has more recently expanded their commitments in this sector. An external evaluation of a programme of this size and scope would be desirable and is recommended by the evaluators.

157. For most agencies the expatriates are the only qualified staff available to them on a permanent basis. Projects are hence very dependent on locally assigned technical staff. Site visit restrictions for international staff have therefore resulted in delays in project installations and ensuing frustration. Lack of appropriate supervision has often led to delays and sometimes to reconstruction, though not to our knowledge of unviable projects.

158. Where agencies have been able to maintain sub-offices or outposts closer to their working sites (Triangle, SCF and HI) this has greatly facilitated supervision of the projects and reduced time lost in travel. It has also led in all cases to good relations with the local authorities. SCF, in particular, has developed a very positive working relationship with local people and authorities as a result of the posting their watsan coordinator in Tanchon for 2-3 weeks at a time. Most agencies have found relationships with central authorities in Pyongyang (primarily the FDRC) more problematic, though there is considerable variation.

159. Restrictions on access to sites have been particularly frustrating for international agencies, and this sector is particularly vulnerable to changes introduced post September 15th. During the review period this is one of several causes that have led to delays in implementation. ECHO has responded positively and flexibly, granting extensions to several projects, though this will be much less feasible under the new FPA.

160. Other delays in the project cycle have surrounded approval, tendering and procurement, though this has recently improved. Water projects are implemented primarily in the spring and autumn, and it is essential that materials arrive in-country in time for the spring working season.

Urban projects

161. As discussed elsewhere, there is growing evidence that urban dwellers include many of the most socially and economically vulnerable people in DPRK. There is also growing evidence, even though this is necessarily unsystematic and anecdotal, that access to safe drinking water may itself be as bad or worse in many urban areas of the country. It is undoubtedly true that the same investment is likely to reach many more beneficiaries in an urban than a rural area. If an urban system is contaminated or breaks down, alternative sources are unlikely to be available. There are indications that urban systems may be just as degraded and neglected as rural ones. Water supplies when available may only reach one or two floors of multi-storey buildings where the majority of the population live. There is certainly evidence that qualified engineers and technicians are more readily available (from the Ministry of City Management) in urban areas.

162. Some partners (UNICEF, CESVI, and next year GAA), with ECHO's support, have consequently moved into the renovation of urban water supplies. In part this is a reflection of confidence acquired over time from working with Korean counterparts, which has encouraged agencies to consider larger projects.

163. Many urban areas, given the volumes of water required, are not amenable to gravity-based systems, but the ECHO projects implemented to date are based on gravity. UNICEF is successfully making use of an irrigation dam combined with a rapid sand-filter. CESVI were fortunate to come across a spring source generating sufficient volume to serve an urban population (15 litres per second) which can be delivered by gravity. The evaluation sees both projects as potentially very successful, not least because of the active involvement and cooperation with the local authorities in the Ministry of City Management. GAA are planning to support a town of 20,000 in 2005 - a pumping system possibly supplemented by a gravity system.

164. A further complication for urban water supply is the fact that chemical water treatment is limited in DPRK. UNICEF provides chlorine to their town supply project, without clear plans as to how this will be taken over in future.

165. The evaluation supports the trend towards larger, urban, gravity-based water supply projects. In rural areas, gravity-based projects should also have priority, though it is recognized that in some parts of the country, particularly the agricultural flatlands in the west, this is seldom an option. In exceptional circumstances, where contamination appears to be severe, and/or where there is clear integration with other activities, pump-based projects can still be considered, but even in these regions there are options for gravity-based interventions and these should have priority.

Geographical/regional aspects

166. ECHO and its partners have generally supported moves to work in the East and North-East of the country, in the belief that hardship and vulnerability are generally greater in these areas, a question which is discussed elsewhere. These parts of the country are seldom far from hillsides, where spring sources appear plentiful, and can often provide a good alternative to existing groundwater sources. In many cases needs can be met by small-scale and low-tech installations.

167. In the extensive agricultural flatlands in the west of the country, which are mainly devoted to rice growing, spring water sources may often be too distant, excluding the option of gravity systems - though even here many settlements are to be found at the edge of agricultural land at the foot of hillsides. In parts of this region saltwater intrusion is often a problem, and groundwater sources, especially in paddy fields, may often be contaminated from agricultural practices. Although existing water sources are sometimes clearly contaminated, it remains impossible to obtain systematic data.

168. In the absence of adequate data about water quality in particular, it is difficult to be specific about regional vulnerability. It has sometimes been possible to obtain plausible information about water quality from the Red Cross; efforts to obtain such data, despite the frustrations involved, should continue to be given the highest priority by ECHO's partners. Information about water availability also needs to be sought as systematically as possible if rational priorities are to be established. Currently we are not recommending particular regional prioritization.

Wastewater management

169. Most ECHO partner agencies have not included wastewater management in their programmes. Those that have done so (Red Cross and CESVI) generally have a limited approach involving institutions and connecting systems to the town waste water system. In many households, evacuation pipes are no more than "water out" installations and do not include even basic drainage or soak-away structures. CESVI have included septic tank construction with standard infiltration system on the premises of a hospital in Wonsan to secure proper sewage management. Only IFRC has a wastewater management component at household level incorporated into their programmes, where the aim is to target 50% of beneficiaries.

170. While all agencies will agree that wastewater disposal is important, along with sewage disposal with which it often combines, and that the technical challenges are usually straightforward, they have often encountered negative responses from the authorities, in part related to the ban (until quite recently) on expatriate access to Korean houses. Yet the consequences of this can be serious. Experience from elsewhere demonstrates that providing increased volumes of water to households without adequate management of wastewater can increase health hazards, typically as a result of blocked and contaminated open sewage ditches ; increased mosquito breeding grounds etc. (a clear recommendation which is stated below)

Development of new technology, materials and equipment

171. Materials and equipment required for water supply projects may no longer be produced locally, or if they are still produced are likely to be of poor quality and/or outdated design. Exposing communities and technicians to new and better materials has been an important task. The greater durability of modern materials can contribute greatly to overall impact and sustainability of the project. Materials such as PVC, PP, PE etc are invariably new to local technicians.²⁸

172. Resistance by the authorities to such materials and technology has diminished with time, and technology promoted by international agencies which is seen as novel or even revolutionary, such as gravity fed systems or solar powered systems, has come to be accepted. At the beginning of the period under review (2001) only the rehabilitation or reconstruction of existing systems was permitted. All ECHO partners are now able to make use of up to date material and technology with keen interest shown by local technicians. The ECHO-funded projects are having a fundamental effect on the attitude towards and acceptance of foreign technology. At the same time there are continued efforts by the authorities to get local materials used.²⁹

173. The evaluators view the introduction of appropriate new materials and technology as an important and positive component of ECHO's interventions, provided that the economic sustainability of the innovations in the longer term is properly considered. Experiments with renewable energy sources, such as the solar-power systems introduced by Triangle, and as advocated in the country strategy paper³⁰, should be pursued. It is essential however that such initiatives are adequately followed up and evaluated.

Cooperation between international agencies

174. ECHO hosts monthly inter-agency meetings on water and sanitation. As elsewhere, there seems to be a good spirit of cooperation. These (expatriate) meetings focus primarily on the reporting of developments and the airing of problems. It might also be useful for there to be more systematic discussion of technical and policy issues in the watsan field - possibly by having specific meetings devoted to this.

²⁸ The IFRC Watsan evaluation report (2002) estimated that the use of such materials improved the lifespan of a project threefold.

²⁹ For more on this question please see the discussion of purchase and tendering in Section C.

³⁰ The EC-Democratic People's Republic of Korea Country Strategy Paper 2001-2004

175. Positive examples of inter-agency collaboration in the watsan field include:
- Project evaluations conducted between the agencies: Concern evaluated SCF's Tanchon project in 2004.
 - Most agencies have made use of trained DPRKRC staff to conduct health and sanitation training/promotion, but are looking at developing separate promotion strategies.
 - CESVI is operating the project in Pangyo which supports the hospital with water where PU is managing the IVF production plant.
 - A Pangyo internet forum was created following the statement of 15/9/04 to keep everyone up to date on possible restrictions in access etc.

Prioritization of criteria for water supply projects

176. There is limited consensus on the key issue of how to prioritize the siting of water projects in DPRK, either within the international agencies or with the DPRK authorities - though as noted the authorities tend to favour urban projects, and several of ECHO's partners have come to concur with that. The following are suggested criteria in DPRK circumstances:

- Degree of contamination of existing source (even if this can only be estimated)
- Adequacy of volume of existing source
- Sustainability of proposed replacement source and system (giving high priority to gravity-based systems)
- Effectiveness of proposed replacement source/system (i.e. cost per beneficiary)
- Savings of time and labour fetching and carrying water under new system

Conclusions: Drinking Water Supply

- The relevance and impact of these interventions appear to have been considerable, though assessment is hampered by lack of information on water quality. Efficiency and effectiveness have generally been good, though very variable. Sustainability is generally good for gravity-based systems and more uncertain for pump-based systems. Positive results are often offset by the absence of wastewater management.
- In general ECHO partners have made efficient use of resources and, in most cases water systems have been technically sound both in terms of design and construction.
- The introduction of new design approaches and modern materials has been an important component of all projects.
- On the job technical training of counterpart staff has been positive, well appreciated and is contributing to the development of national capacity in the sector.
- ECHO-supported interventions in the water sector are seen as a priority by national and local authorities in DPRK and are relevant to immediate needs. They also provide ECHO and its partners with an increased profile.
- The sustainability of pump-based projects is a concern, although the introduction and growing acceptance on the part of the DPRK authorities of gravity-based systems is a very important step in improving sustainability.

- The recent move towards addressing the needs of urban populations under the ECHO programme is justifiable, both in terms of coverage and cost-effectiveness.
- To date relatively little attention has been given to wastewater management, which is a point of concern given the environmental health consequences of increasing the volume of water supplies to households and institutions.
- Needs assessment and project appraisal needs to be more systematic, despite the constraints of the DPRK environment. In particular, every effort should be made to obtain information about existing water quality and quantity when interventions are being considered.

Recommendations: Drinking water supply

- ECHO should continue with funding support to the water sector, with a priority given to gravity-based systems, both in rural and urban populations.
- Project proposals should always include components for capacity building and continued training for DPRK technical staff.
- ECHO should support work in larger, urban water supply projects where these are technically feasible and where gravity based systems are possible.
- ECHO partners should always assess the issue of wastewater management in both domestic and institutional water supply project proposals, and should implement wastewater components wherever this is appropriate and feasible. Projects should never be implemented if poor wastewater management is likely to negate the impact of the project.
- Where possible, ECHO should facilitate joint efforts to improve water resource mapping, needs assessment and water quality; simple criteria should be developed, including cost-effectiveness, to determine the priority of interventions.
- Given the scale and scope of UNICEF water supply projects, the evaluation team recommends that an external evaluation be carried out.³¹

B3.2 Sanitation

177. Whilst the water supply situation in the country is chronic, the sanitation situation is even worse. There is widespread consensus amongst international observers, shared by the evaluators, that improving hygiene and sanitation would improve health to a greater extent than any other type of intervention. At the same time there are formidable constraints in implementing effective sanitation projects. Partly this derives from the limited interest or even the opposition of local authorities to such interventions; the views of ordinary citizens are as usual almost impossible to ascertain. Even more serious are concerns about the sustainability and replicability of many of sanitation interventions that have been introduced.

³¹ In relation to feedback on the draft of this report, we should point out this recommendations should not be interpreted as a criticism of these projects, which appear to have been very largely successful. Any programme of this scale deserves evaluation, which cannot of course be done on the basis of a visit to one project - all that was possible under our overview evaluation. We believe UNICEF would benefit considerably from such an evaluation, especially since their own capacity for monitoring and assessment is comparatively limited.

178. Local authorities in DPRK have often argued against sanitation projects, or the sanitation components of watsan projects, particularly when this relates to domestic sanitation. International agencies, based on their worldwide experience, are strongly attached to sanitation programmes. All programmes supported by ECHO in the water and sanitation sector include institutional sanitation development and/or the upgrade of existing facilities. Domestic sanitation has been carried out by the Red Cross and GAA, although others agencies are planning or considering this.

Institutional sanitation

179. Although impact assessment is almost impossible and has never to our knowledge been attempted in DPRK, the case for rehabilitating and upgrading institutional sanitation is cogent. The need for adequate hygiene and sanitation in hospitals and residential institutions is clear, and the inadequacy of hygiene and sanitation in such institutions is often striking. Even where sanitation is not seen as a priority by local authorities, they may still be reasonably supportive, or their resistance is likely to be limited and easily overcome by incorporating sanitation with other interventions. It can also be argued that prioritizing sanitation despite lack of local enthusiasm is a way of upgrading the status of the issue in the long term.

180. At the same time the case for improving or introducing sanitation at non-residential institutions such as small clinics is difficult to make. People generally only use institutional sanitation when they have to, preferring their domestic alternative when possible. The use of a latrine attached to a small clinic is likely to be very limited, and its impact of its installation or rehabilitation will be equally limited.³² The need for school sanitation is clearly significant, though hospitals and residential homes should have higher priority.

181. Sanitation facilities installed in institutions with ECHO support which were seen by the evaluators all appeared to function satisfactorily. Sewage systems are usually connected to the town wastewater systems or, as in the case of CESVI, a septic tank system on the hospital premises. It appears that the majority of wastewater systems convey untreated sewage directly into rivers or other surface water bodies.

182. Working with institutions can have additional benefits by widening exposure to improved sanitation practices. For instance, at the UNICEF assisted school in Jongpyong, the children showed a very positive interest in their sanitation facilities, especially since the lavatories were equipped with large mirrors. The very fact that sanitation has been prioritized, not least by such novel people as expatriates, may have some long term impact in improving recognition of the importance of the issue.

Domestic sanitation

183. Despite the unquestionable potential benefits derived from improved domestic sanitation, it is much more difficult to make a case for prioritizing 'hardware' interventions in DPRK, i.e. the introduction of improved models for domestic latrines - unless, that is, the improvements are genuinely affordable. This difficulty is **not** primarily because of the resistance of local authorities, nor because expatriate access

³² If impact assessment of institutional sanitation interventions is ever attempted in DPRK, the use of latrines attached to small clinics would be the easiest place to start.

to Korean houses has always been a sensitive issue (and may become more so following the Sep 15 pronouncements). These are significant constraints, but given the potential impact of improved domestic sanitation, there remains an argument for trying to overcome such resistance, even as this remains a frustrating process. Indeed there are many examples in ECHO-supported interventions where such resistance has been overcome.

184. A much greater problem relates to the sustainability of the interventions that have been undertaken or planned by ECHO partners. There is a need for a hard-headed look at whether the development of improved latrine models can be sustained from local resources in the short to medium-term future. Domestic latrines, globally speaking, are almost never directly funded by governments or local authorities, and this is clearly not an option in DPRK. On the contrary, under the impact of economic changes, domestic sanitation (i.e. 'hardware' components within the house or compound) will be seen as an overwhelmingly domestic responsibility, as elsewhere in the world. Except for demonstration sites and small pilot initiatives, householders will have to bear the cost of installing or improving their latrines.

185. Rural households in DPRK, even those whose levels of subsistence may be adequate, have very limited cash resources. The varying and much-debated technologies introduced by ECHO partners range in cost between 100 and 250 euros per latrine (Please see Annex D for details). This is an unheard of amount of cash for the average DPRK household. Even if they were to possess it, it is extremely unlikely that they would want to invest what for them would be a huge amount of money in a new latrine.

186. It is true that the situation is changing quite fast, and that the cash economy is extending its reach quite rapidly in DPRK. It is also true that the rate of change could accelerate, depending on the economic policies adopted by the authorities. At the same time it must be recognized that it is inconceivable that substantial individual or local resources will be devoted to domestic sanitation in the foreseeable future, and the implications of this must be accepted.

187. It would be possible to continue with the current situation, whereby improvements in domestic sanitation are wholly financed from international sources. Indeed one NGO representative, at the evaluation's water and sanitation feedback workshop, said that sanitation was such an important issue that this was indeed acceptable. The problem is that the proportion of the population that could be reached in this way would be minute, and that the neighbours of beneficiaries could do no more than look on, perhaps in envy, since they would not be in a position to replicate the model themselves.

188. In our view only very low cost initiatives, such as the promotion of improved squatting plates, are sustainable as 'hardware' components of improved sanitation.³³ The introduction of more expensive models of domestic sanitation should be phased out for the foreseeable future. The whereabouts of existing new model latrines should however be securely mapped and monitored; depending on policies adopted by the government, economic development in DPRK could become very rapid, and it may

³³ Concern has been the agency most aware that such interventions must be affordable and sustainable.

not be many years before such initiatives become viable. Equally, however, this may not happen for a decade or more. Latrines costing 150 euros will need to bide their time. In the mean time more limited but still life-saving improvements should be prioritized.

Promotion of hygiene and good sanitation practices

189. Epidemiological information in DPRK, despite its limitations, indicates that a high proportion of diseases are likely to be rooted in poor hygiene and sanitation practices. Soap is often unavailable and/or is little used, and hand washing does not appear to be extensive.

190. The potential of promoting hygiene awareness and good sanitation practice would seem to be considerable, even though this is generally not seen as a priority locally.³⁴ All ECHO-supported agencies have educational ('software') components included in their sanitation programmes. The IFRC, in collaboration with DPRKRC, have come the furthest in this field, conducting public health workshops for Red Cross volunteers. Provision of soap should remain on the agenda of such programmes - even though this can also provoke an unfavourable local reaction.

191. The health department of the DPRK Red Cross has been engaged by several ECHO-supported agencies (GAA, CESVI and Concern) to conduct hygiene promotion as a service. Although impact assessment has not been attempted, some benefits are likely, including demonstrating the significance attached to this to local people and local authorities.

192. The hygiene promotion materials currently used by the Red Cross are somewhat over-technical. IFRC plans to introduce new materials and methodology known as PHAST (Participatory Hygiene And Sanitation Transformation). CONCERN and GAA are working on a modified version of PHAST. IFRC/DPRKRC have produced a booklet which is distributed during training. UNICEF has also produced a hygiene manual which it plans to distribute through the Women's Union (a parastatal agency with national outreach). There is clearly a need for better coordination of the production of materials.

193. Concern is planning to conduct training sessions through the Ministry of Public Health - though it is too early to say whether this will succeed, this is an excellent approach since the MoPH puts considerable emphasis on public health and has enormous manpower resources.

Productive uses of excreta (night soil)

194. The objective of a sound latrine is to provide for safe disposal of excreta. In rural areas of DPRK the widespread use of excreta for fertilizer must also be taken into account. Consequently, in addition to safe immediate disposal, safe storage, with possible composting, is required.

³⁴ As with other aspects of sanitation, the 'software' components may encounter opposition from national and/or local authorities. GAA was recently refused a visa for a sanitation promoter, though it is not clear whether or not this was related to wider developments.

195. The rapid expansion of small-scale domestic gardening, under the impact of economic reforms, appears to have increased the value of excreta as a commodity (and appears to have led to some conflict over whether it should be used on private vegetable plots, or handed over to the cooperative farm as previously). This increase in value has in turn led to an increase in the handling of fresh excreta, with commensurate increases in the risk of disease outbreaks related to faecal-oral transmission routes.

196. This issue needs to be addressed sensitively, but educational materials should include information relating to the safe storage and handling of excreta, as well as the most appropriate methods of agricultural use.

Conclusions: Sanitation

- As in many other developing country contexts, improved sanitation and positive hygiene behaviour have the greatest potential to improve public health. However, in DPRK there is a resistance to such projects on the part of the authorities, making this a problematic area of intervention for ECHO partners.
- The institutional sanitation facilities constructed with ECHO funding are generally of a satisfactory quality and are effective in moving sewage off-site, though there are sometimes concerns about the final deposition of untreated sewage. Nevertheless these are seen as relevant and effective interventions.
- Improved institutional sanitation financed by ECHO has almost certainly had a positive impact in terms of demonstrating health benefits, particularly in schools.
- The provision of domestic sanitation facilities by ECHO partners is much more problematic. The latrine programmes have generally been well implemented technically, but the main issue is the replication and sustainability of relatively very expensive facilities that are well beyond the reach of DPRK households.
- The domestic sanitation components funded by ECHO reach a tiny proportion of households, and if current approaches are maintained, these interventions would have to be directly and wholly funded by external finance for the foreseeable future.
- Hygiene promotion is included, to varying degrees, in all ECHO partner programmes. Although impact is difficult to assess, these initiatives are supported, particularly when they link into local organizations.
- There is some duplication in the production of hygiene promotion materials between agencies working in this field.
- Overall, for institutional sanitation, interventions have been relevant, efficiency and effectiveness adequate, and impact considerable, though difficult to assess. Sustainability in terms of replicability may be weak but this is not too serious. For domestic sanitation, installations have generally been inappropriate because they are inherently unsustainable and unreplicable.

Recommendations: Sanitation

- ECHO should continue to finance interventions in institutional sanitation, with a focus on hospitals and residential homes, and where appropriate on schools.

- Greater attention should be given to the end-point of sewage removed from institutions to avoid creating contamination focal points.
- ECHO should review its support to domestic sanitation in DPRK and focus only on very low cost interventions that stand a genuine chance of being replicated.³⁵
- The focus on hygiene promotion should be continued. Plans should be laid to attempt impact assessment in one or two sites.
- There is a need to promote greater consensus in hygiene promotion strategy amongst ECHO partners, better coordination in the production of educational materials, and a focus on a limited number of key messages that are central to breaking disease transmission cycles.

³⁵ In relation to feedback received on drafts of this report it should be noted that our recommendations on domestic sanitation are in no way contradicted by ECHO's needs-based mandate. The arguments are about how needs can be met effectively and efficiently with available resources. Building latrines that cannot be replicated fails to do this.

SECTION C: OPERATIONAL AND CROSS-CUTTING ISSUES

C1.Decentralization and logistics

197. Agencies able to work partly from a regional base have discovered this has great advantages. They can not only save a great deal of travelling time, but there is much greater opportunity to develop adequate relationships with local authorities. This factor is likely to become even more significant as and when the DPRK government makes further moves to loosen central control.

198. Opportunities for decentralization may well have gone into reverse post September 15th. Decentralization also goes against the grain for an international community that has come to terms with life in Pyongyang but not necessarily with a tougher existence in the provinces. Yet if more agencies were prepared to live in the same regional centre - Hamhung is the most obvious candidate - it would be possible to develop communications and social facilities that would help to ameliorate hardship.

199. Logistical considerations can be very significant in DPRK, a mountainous country whose roads are often poor. The evaluation nevertheless strongly supports the trend for agencies to work in the East of the country, where there have been at least limited indications (primarily from WFP) that economic conditions are worse, at least for urban communities. However the logistical considerations of working in the far North-East, i.e. in North Hamgyong or Ryanggang provinces, which are more than two days drive from Pyongyang and inaccessible in winter, are of a different order, especially for agencies lacking a regional base. Needs in these regions may be greater, but effectiveness and efficiency are seriously affected if a high proportion of time is spent travelling. Careful consideration should be given these factors by agencies, notably including UNICEF and PU.

Conclusions and recommendations: decentralization and logistics

- The establishment of regional sub offices should remain on UN and NGO agendas, even if put on hold until the implications of the September 15th statement are clearer.
- Logistical considerations and their impact on effectiveness and efficiency should be taken fully into account with regard to working in the far north-east.

C2.ECHO staffing and programme management

200. ECHO staffing levels and responsibilities in DPRK appear appropriate, particularly by comparison with ECHO offices elsewhere. ECHO management has been responsive and very capable. There is a strong case for upgrading technical support and assessment by externally based ECHO staff with sectoral expertise, or if these are unavailable, by short-term consultants.

201. Planned increases in the frequency of ECHO project monitoring visits are strongly supported. Current requirements of two project visits a year should be

considered a minimum, and a flexible approach should be adopted, based on the comparative needs of projects.

202. Though aware of the competing demands of ECHO's programme in China, the evaluators believe that the DPRK representative should maximize his time in-country, especially during periods when the humanitarian community is facing exceptional difficulties or dilemmas. Advocacy work in defence of the community, and especially of INGOs, should be given high priority, despite the frustrations of such work.

Conclusions: staffing and management

- ECHO management has been capable and responsive, and staffing has been appropriate.
- Recent improvements in ECHO project monitoring capacity are welcome.

Recommendations: staffing and management

- Technical support to projects and project assessment should be upgraded by providing appropriate expertise on an occasional basis.
- Greater emphasis should be given to ECHO's advocacy work in DPRK, especially during difficult periods.

C3.Coordination and liaison

203. Coordination between international agencies in DPRK is generally excellent, certainly in comparison with many countries, though some specific areas for improvement have been highlighted in the report). The main modalities are weekly inter-agency meetings and sectoral meetings which generally meet monthly. A limitation of these meetings is that they are generally focused on reporting developments and problems; other fora are required for discussing broader policy issues. (Re watsan meetings please see Section B3.1.) For almost all of the period under review ECHO appears to have had excellent relations with all international agencies, as well as with member state embassies.

204. For ECHO and ECHO's partners, as for most diplomatic missions to the country, liaison with DPRK authorities is often difficult, sometimes extremely so, but remains an important priority.³⁶ Despite the frustrations, and the longstanding efforts to date, there seems to be no alternative to maintain efforts to meet with FDRC (in particular) to discuss issues of mutual interest, if possible by establishing a regular forum rather than ad hoc meetings to deal with particular crises or problems. Maintaining high level contacts in the Foreign Affairs Ministry could also be invaluable. This is even more of a priority after September 15th, especially since ECHO has a particular responsibility and capacity to represent the interests of the international NGOs whose position may become increasingly precarious.

³⁶ A striking indication of practices in DPRK is that the authorities have never responded to invitations to participate in meetings to review the CAP, which have been taking place for nine years.

205. Liaison between international agencies and DPRK authorities is almost invariably much better at local, regional and provincial level than at central level. This has implications for programming discussed in Section C2 above.

206. Although not always popular with local authorities, or even with some ECHO partners, ECHO should continue to encourage the attachment of ECHO stickers to items it has funded, whilst recognizing that it cannot always insist on this. In DPRK, whose citizens are not always given an accurate or positive picture of the world beyond their borders, this is particularly justified. However a new bilingual ECHO sticker should be produced which includes the words 'European Commission Humanitarian Aid Office' in English and Korean.³⁷ Something more meaningful, perhaps 'provided by the people of the European Union' might also be considered.

Conclusions: coordination and liaison

- Coordination and liaison between international agencies is generally excellent. ECHO has been a major contributor and maintained excellent relationships.
- Coordination and liaison with authorities is generally difficult, but extremely important for ECHO. It is generally much better at a local or regional than at a central level.

Recommendations: coordination and liaison

- ECHO should continue to give high priority to liaison with the authorities at the highest possible levels, and if possible through regular and systematic exchange of views.
- ECHO should produce bilingual stickers, and promote their distribution and use.

C4.Tendering and procurement

207. Difficulties with tendering and procurement procedures have often contributed to delays and project extensions during the period under review, particularly for watsan projects, though the situation has recently improved. Unless funding approval and therefore tendering can begin in early autumn at the latest, there is a risk that the spring working season will be missed, with serious consequences for ECHO's one year project cycle.

208. Globally speaking, local purchase is generally seen as the best option in terms of cost-effectiveness and sustainability. In DPRK this is true for basic materials such as cement or gravel, but refined products such as pipes and windows as well as higher tech products such as pumps are usually cheaper in China, even allowing for transport costs. Maintenance and repair of imported goods may be more difficult, with implications for sustainability. They may also be less suitable: e.g. pumps produced in DPRK are better equipped to withstand the frequent power surges and

³⁷ The use of French and most other European languages in public places in DPRK is of limited value.

phase drops. However supply problems and delays may be much worse than with imported alternatives.

209. All such factors need to be taken into account in a marketplace which is now changing quite rapidly. The new FPA will make project extensions less feasible, and tendering procedures allow only limited room for manoeuvre. Nevertheless it is hoped that ECHO will continue to respond as flexibly as possible to these circumstances, and continue to bear in mind the seasonal constraints for many project cycles.

Conclusions: tendering and procurement

- Tendering and procurement have often contributed to delays in project implementation, to which ECHO has often responded flexibly with extensions.
- Factors to consider when purchasing supplies and equipment are complex and changing.

Recommendations: tendering and procurement

- ECHO should continue to be as flexible as regulations permit.

C5.Children

210. Children comprise an important cross-cutting issue according to ECHO's Aid Strategy for 2004. As the group most vulnerable to humanitarian crises, children require special attention and mainstreaming programmes that address their needs is a priority. In DPRK official policy has emphasized the importance of children's care, upbringing, education and overall development, but these priorities have suffered greatly in the more recent years of crisis. For example there is evidence to suggest that between 1993 and 2000, under-five mortality nearly doubled from 27 deaths per 1,000 live births to 49³⁸.

211. ECHO programmes support children's well-being directly through child health, nutrition and food aid programmes implemented mainly by UNICEF and WFP, and indirectly by NGOs working in the water and sanitation sector and other agencies (IFRC, WHO, HI, PU, etc) working in the health sector.

Conclusions and recommendations:

- Through its diversity of programme sectors and partners, ECHO is providing a variety of inputs to address child needs. Infrastructure improvement for institutions serving children (baby-homes, paediatric hospitals, nurseries, schools, etc³⁹) should be prioritised and relevant issues addressed (see Section B1.2)

³⁸ UNICEF. Analysis of the situation of children and women in the Democratic People's Republic of Korea. UNICEF, DPRK. October 2003.

³⁹ Schools should probably be seen as a second level priority in comparison with the other institutions mentioned.

- Our recommendation to expand the partner base and the overall scope of nutrition programmes (see Section B2.2 above) is very relevant here, though this is of course very dependent on the development of government policy and the availability of funding.

C6. Gender

212. The DPRK Constitution provides equal social status and rights to men and women (Article 77). Many childcare responsibilities are covered by the government through the network of nurseries, kindergartens and schools, enabling women to participate in productive and public spheres. Women comprise a significant part of the workforce (said to be 48.4% in 1998). Officially they have opportunities and care equal to men. However, traditionally women are responsible for household sustenance (e.g. gathering firewood, fuel and food, cooking, cleaning and caring for young children) which has a disproportionate impact on their workloads - even more so in rural areas⁴⁰. Some health indicators are particularly disturbing. For example the 2002 national nutrition survey found that 32% of women were malnourished (measured by MUAC) and nearly 34% were anaemic.

213. In 2003 ECHO supported UNFPA, the only international organization in DPRK whose mandate is strictly related to women's health (see section B1.3). UNICEF also contributes women's nutrition status by improving availability of iron and folic acid supplements and post-partum vitamin A supplementation. Other programmes providing essential drugs, rehabilitating health institutions and water systems also provide indirect inputs to women's health. WFP includes gender issues in all its programming, with women and children priority recipients of food aid. Some institutional renovation supported by ECHO is of direct benefit to women - for example the renovation of hospital maternity facilities.

Conclusions and recommendations:

- There is scope for gender work within the programmes funded by ECHO in DPRK. Mainstreaming gender issues into general programming should be encouraged where possible.

C7. The elderly

214. The elderly are not specifically targeted in programmes funded by ECHO, with the exception of an initiative by Triangle that has made little progress to date. Information about the elderly in DPRK is particularly scarce, though informal research by WFP has led them to designate them a vulnerable group - though not one of the most vulnerable; as a result 700,000 elderly people stopped receiving WFP rations following the food aid cuts in 2002, and this has only partially been restored.

⁴⁰ UNICEF. Analysis of the situation of children and women in the Democratic People's Republic of Korea. UNICEF, DPRK. October 2003.

215. The project started by Triangle began in July 2004 and will be providing support to three old people's homes, focussing on essential services such as water and sanitation, health inputs and hygiene education. It also includes an institutional capacity building component for HelpAge DPRK. This is a new organization, based on the model of the Korean Association for Supporting the Disabled (KASD) that will focus on providing support to the elderly. However this requires very sensitive handling, since unlike in the case of the KASD, there is as yet little evidence of significant independent capacity, and a danger that it will be judged by the authorities primarily on its ability to attract overseas funding. It is too soon to know how successfully this will develop.

Conclusions and Recommendations:

- WFP has considered the elderly a vulnerable group for some time and the DPRK government appears to have recognized this with the creation of HelpAge DPRK, which is still emerging but will hopefully develop into a strong partner organization.

C8.Environment

216. DPRK authorities generally give little consideration to environmental protection and safety. For example, despite evidence of ample groundwater, surface water is often used for domestic supply. Yet both black and grey sewage water is often conveyed into these rivers untreated. The dangers these contaminants pose to both human health and the wider environment appear very serious, though as usual there is a great need for data on the extent and local particularities of such contamination.

217. Although environmental components and considerations are rarely made explicit in ECHO-supported programmes, their environmental implications are often considerable. For example the move towards spring catchments and gravity-fed water supply systems requires that protective measures are implemented above and around the sources, and that advice is given about the link between vegetation cover and sustainable water sources. These issues are seldom well understood by local authorities, but progress is certainly possible, as has been shown by CESVI, SCF, IFRC and GAA.

218. Sewage is often a major problem, as mentioned in Section 2.3. For example at a project site in the dense semi-urban community near Tanchon, open ditches convey sewage to the canals used for clothes-washing, a serious health risk that the provision of adequate domestic water supplies may even have increased. Proper wastewater management is essential. GAA has gone furthest in developing an integrated approach to safe latrine disposal, involving composting, and the appropriate and timely application of night soil on fields.

219. SCF, CESVI and the Red Cross are providing and promoting incinerators for safe disposal of hospital waste, an initiative well worth supporting and replicating.

C9.Ryongchon Train Disaster

220. Following the train explosion in Ryongchon on April 22, 2004, ECHO was able to respond immediately with an allocation of €200,000 to the Danish Red Cross, ensuring that the Red Cross in DPRK was able to provide drugs and other medical supplies on the spot. In the immediate aftermath of the disaster, ECHO allocated further funds (€1,250,000) for the reconstruction and rehabilitation of the affected area. Four projects were funded under this decision and are currently being implemented by WFP, UNICEF, ADRA and GAA. Because of time constraints the evaluators were unable to visit the site of the explosion or to evaluate most of these projects.

221. Some assessment however was made in Pyongyang of the ADRA project in Ryongchon, which includes the reconstruction of the local hospital. Although the project is still at an early stage, a short account is included to illustrate problems that can arise in DPRK. 50% of the cost (€150,000) is funded by ECHO, while the remaining 50% was funded by WHO and SDC. Disagreements emerged between ADRA and the Ministry of Public Health, who were working for the first time, over the design of the new hospital. The MoPH wanted to maintain their standard design approaches, whilst ADRA, with support from WHO and ECHO, proposed a more modern design that made better use of space and resources. Eventually ADRA was able to convince the ministry of the advantages of the new design.

222. However after September 15th ADRA could not obtain permission to travel to Ryongchon. They received reports nevertheless that work was in progress. When they eventually managed to visit Ryongchon in late October, ADRA found that the reported work had not in fact been undertaken. It would be wrong to extrapolate too heavily from this particular incident, but it undoubtedly contributed to the climate of unease amongst the international agencies, particularly since September 15th appeared to be a contributing factor.