



**Evaluation of ECHO's Actions in
the Democratic People's Republic of Korea
(2004 – 2007)**



EUROPEAN COMMISSION



Humanitarian Aid

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The comments contained herein reflect the opinions of the consultants only.

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DEMOCRATIC PEOPLE's REPUBLIC OF KOREA (2004 - 2007)**

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(key) Abbreviations and Acronyms

ADRA	Adventist Development and Relief Agency (NGO)
AES	Anti-Epidemic Station
ARI	Acute Respiratory Disease
CESVI	Cooperazioni e Sviluppo (NGO)
Concern	Concern Worldwide (NGO)
DfID	Department for International Development (United Kingdom government)
DG AIDCO	European Commission's Directorate General for External Cooperation
DG ECHO	European Commission's Directorate General for Humanitarian Aid
Dong	Urban district in DPRK
DPRK	Democratic People's Republic of Korea
DPRKRC	National Red Cross Society of DPR Korea
EC	European Commission
EPI	Expanded Programme of Immunization
EUPS	European Union Programme Support
FAO	United Nations Food and Agricultural Organization
GAA	German Agro Action (NGO)
HI	Handicap International (NGO)
IFRC	International Federation of Red Cross and Red Crescent Societies
IV (fluids)	Intra-Venous fluids
KECCA	Korean Cooperation Coordination Agency
KFPD	Korean Federation for the Protection of the Disabled
LFA	Logical Framework Analysis
LoU	Letter of Understanding
LRRD	Linking Relief, Rehabilitation and Development
MFA	Ministry of Foreign Affairs
MoCM	Ministry of City Management
MoPH	Ministry of Public Health
NGO	Non-Governmental Organization
OCHA	(UN) Office for the Coordination of Humanitarian Aid
PHC	Primary Health Care
PU	Première Urgence (NGO)
RELEX	Relations Extérieures (EC)
Ri	Rural district in DPRK
ROK	Republic of Korea (South Korea)
RSO	Regional Support Office (DG ECHO)
SC-UK	Save the Children Fund, United Kingdom (NGO)
SIDA	Swedish International Development Agency
TOR	Terms of Reference
Triangle	Triangle Génération Humanitaire (NGO)
UN	United Nations
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WFP	World Food Programme
WHO	World Health Organization

A. EXECUTIVE SUMMARY

A.1. INTRODUCTION

Evaluated country: Democratic People's Republic of Korea (DPRK)

Dates of evaluation: Field visits in DPRK were carried out between 15th March and 12th April 2008 (see overall Timetable in Annex C)

Consultants names: Michel Van Bruaene (Team Leader, Water and Sanitation, Food Aid sectors) and Dr Danielle Deboutte (Health and Nutrition sectors).

Purpose and Methodology

- i. The global objective of the evaluation (TOR §54-57) was to assess the appropriateness of DG ECHO's intervention in DPRK since 2004. The total budget for the period considered amounts to some €40.4 million. The bulk of the assistance has consistently been dedicated to health and water/sanitation activities, to the exception of one Decision regarding food aid in 2005 and two emergency Decisions covering a train accident in 2004 and floods in 2007.
- ii. The analysis had to focus more specifically on the following issues: DG ECHO's strategy and intervention logic in view of the significant changes that occurred over the period; the achievement of objectives and related impacts; the consistency of funded activities with DG ECHO's broader mandate provisions; and the phasing out strategy / LRRD, in particular regarding DG AIDCO's Food Security budget line. The sectors of Health, Water and Sanitation (also the two main axes of the final 18-months Decision of November 2006) were to be assessed in-depth, and to any possible extent, the earlier interventions in the sectors of Nutrition and Food Aid (Decisions of 2004 and 2005).
- iii. The TOR did not require an assessment of emergency relief in case of disasters; this recurrent issue in DPRK will therefore only be considered from the diagonal point of view of possible evolution factors [§1-4, 229-231].
- iv. The point in time for this evaluation (towards the end of the programme, i.e. 'final' or ex-post) makes it a typical *summative* evaluation¹, which emphasizes its key *lesson learning* perspective. *Accountability* is stated as the second main purpose of the evaluation. Whilst the importance of accountability should always be outlined in humanitarian aid, it comprises several key aspects, some of which may not easily be assessed –or be relevant- in the specific DPRK context (see below). [§5]
- v. After initial briefings in Brussels and with the Bangkok RSO, the evaluation was given the opportunity to carry out a large range of field visits (some 4,000 Km) throughout most accessible provinces of DPRK (Annexes B, C). Despite constraints (below),

¹ An evaluation conducted at the end of an operation -or a phase thereof- to determine the extent to which the planned results were produced. A summative evaluation is intended to provide information/lessons about the value of the operation – ALNAP.

interviews were conducted systematically with humanitarian and development actors, local authorities and beneficiaries according to a structured questionnaire, in order to triangulate and cross-check findings as much as possible. To emphasise the lesson learning perspective, criteria were preferably approached by using the underlying question “if you had the opportunity to do it all over again, with hindsight, would you do the same...?” [§6-8]

Constraints

- vi. As expected, the evaluation encountered some severe constraints. Evaluating –and implementing projects- in DPRK are very challenging tasks, despite the high degree of courtesy that generally prevails in relations with local stakeholders. The underlying purpose of evaluation (i.e. to learn from successes and failures) does not seem to be correctly understood by most local counterparts and project actors, being at the exact opposite of the general attitude which aims at showing only flawless achievements – and consistently hiding or denying any information that would not fit with the politically correct line of thought.
- vii. A number of detrimental implications ensued. As for any other international staff, our field visits had to be meticulously planned at least one week in advance, hence all visited locations had ample time to prepare themselves and to show only what they wanted to show. Every interview was carried out in the presence of a KECCA (Korean Cooperation Coordination Agency) representative and a number of members of the local People's Committees, which excluded any deviation. There was a universal lack of conclusive/comparable figures, reliable baseline data and usable statistics. Vague and generally positive statements, unsupported by evidence, were the rule. Where access was authorized, the notion of 'access' itself had to be qualified, being usually restricted to direct project outputs only. As the numbers of international staff are strictly limited, some key daily management tasks are often left to national staff, designated by counterpart Ministries and organizations. In that framework, the principle of independence or the key issues of accountability towards recipients and access to potential final beneficiaries are largely irrelevant.
- viii. Furthermore, the whole structure of the DPRK society appears to be vertically segmented, which often prevents coordination and horizontal/cross-cutting linkages, even between different counterpart services reporting to the same Ministry.
- ix. As a result, the findings of this evaluation –as we can only state patterns of facts that have been positively identified- are mostly bound to be what the authorities would probably like them to be. These patterns are sometimes complemented by isolated but plausible information, which we have treated to the best of our ability. There were many other estimates and guesses, often too conflicting to be reported here. DPRK is also a place where rumors can easily be fed into an information-starved and tiny expatriates community. [§14-22]

A.2. KEY FINDINGS

Global Strategy Level

- x. At the global level, DG ECHO's strategy over the concerned period had to take into account at least five main factors of change. The most critical one, mentioned in the TOR (§6-8), had been the decision by the DPRK authorities at the end of 2005 to stop humanitarian aid. Although DG ECHO's own analysis at the time had also shown that the worst of the humanitarian crisis seemed to have been overcome, this donor was faced with a critical dilemma. In close cooperation with AIDCO and RELEX, the favoured option chose to consider DG ECHO's position as an integrated EC Service and to fund one last² 18-months Decision in November 2006, in order to finalise the ongoing activities where relevant, to contribute to a favourable image of EU in DPRK, and to give some time for putting in place a workable LRRD scheme with DG AIDCO. The effects on ECHO-funded projects have been far-ranging, including the departure of some partners and the focusing of the six remaining NGOs on development-oriented activities in the EUPS (European Union Programme Support) structure. [§31-2, 43-7]
- xi. In the process, DG ECHO's principles and its strategic assessment tools were stretched to their very limits. In some cases (IV fluids, water and sanitation), activities spanned almost the entire 'grey zone' up to the far edge of pre-development though without firm LRRD commitment, with inconclusive effects in terms of e.g. sustainability (below). The global impact of the Decision seems however to have been broadly positive. [§46-7, 60-71]
- xii. The four other key factors of change were perhaps less immediately crucial, but no less challenging: the recurrent natural disasters (increasingly human-made, by deforestation and farming on marginal lands); the 2002 economic reforms; the 2006 international sanctions; and, very recently, the seemingly bolder cooperation policy initiated by the newly elected President of South Korea (ROK), the largest donor to DPRK. [§33-42]
- xiii. LRRD with DG AIDCO's new call for proposals in Food Security has been established: potential activities could be proposed by most NGO partners. There are however some restrictions: the sectoral scope of DG ECHO-funded activities was significantly reduced; some partners will be trying to find new 'niches' in activities for which they do not have much expertise in DPRK; and the imposed 'EUPS' denomination is not conducive to finding new donors out of the EU framework. [§48-53]
- xiv. Among EU member States, Sweden has the longest standing relations with DPRK (35 years), and SIDA is by far the most active EU bilateral cooperation agency (its funding is broadly equivalent to the sum of all other agencies). Until now, SIDA's policy has aimed at following DG ECHO and complementing its activities. In this sense, DG ECHO's withdrawal was perceived as a gap in the EU complementarity, but SIDA has

² Emergency Decisions could still be adopted against e.g. natural disasters.

adapted its strategy accordingly, with limited resources. LRRD funds were provided to 5 of the 6 EUPS NGOs. [§54-6]

Operational Strategy Level

As operational strategy usually includes several aspects pertaining to relevance, this criteria will be considered at this level rather than in the sector strategy below.

- xv. The selection of sectors for the 2006 Decision was consistent both with the objective to pursue and consolidate past achievements, and with the identified key needs of the country. [§44, 72-7, 142-6, 192]
- xvi. According to the Ministry of Public Health (MoPH), DPRK is increasingly dependent on imported pharmaceuticals, being only able to produce locally some 30-40% of its needs against 70% in the 1980s. Despite recurrent over-use of some drugs (injectables, IV fluids) and the probability of some hidden stocks in the better-managed healthcare facilities, there appeared to be a consistent and preoccupying chronic shortage of essential renewable supplies. In that perspective, the continued distribution of essential medicines to more than 5,000 primary healthcare facilities and the supply (though not so much the 'decentralised' production) of quality IV fluid in safe PVC bags were relevant. [§78-81, 115-7]
- xvii. Continued support to vulnerable disabled and isolated elderly was also highly relevant, as the prevailing attitude of authorities is still to hide or deny the extent of e.g. disability issues. [§128, 130, 219, 225]
- xviii. Sustainable solutions would however require in-depth reforms of MoPH (and contiguous line Ministries) and the definition of a comprehensive health policy, activities for which the mandate of WHO designates the agency to assume a leading role. [§82-4]
- xix. There were also clear needs in water and sanitation (especially in urban areas), a sector in which DG ECHO had been by far the largest donor in DPRK. Water has often been considered as an 'entry point', as authorities were generally keen to restore a much depleted water supply. Partners with specific mandates (SC-UK, UNICEF) have e.g. used water projects to expand activities and reach their main target populations. Many water systems had been left half completed in 2005. Consolidation or completion of ongoing projects should therefore be seen as adequate. A precipitated phasing out of water projects after 2005 would probably have been quite detrimental to the beneficiaries, the partners, and the overall EU image in the country. [§147-150]
- xx. Nonetheless, neither the nature and extent of the risks, nor their solutions could arguably be contemplated within the scope of humanitarian emergencies. The causes of the problems were clearly structural and the responses are to be developmental. The towns could not be chosen according to any identified higher vulnerability, but often seemed to correspond to some national priorities, to the influence of some local figure, or to the presence of an NGO in the area. The potential scope of works is still

staggering, as comparable problems could probably be found in the main towns of nearly every county (204) in DPRK. Furthermore, additional water supply is likely to increase health hazards generated by the lack of wastewater management and quality testing (see below). Solutions depend from the definition of an appropriate policy by the Ministry of City Management (MoCM), a sector in which UNICEF is currently taking the lead. [§129, 151-6]

- xxi. Funding of food Aid by DG ECHO has been stopped after 2005, and no significant signs of malnutrition could be detected, to the exception of some isolated cases reportedly related to breast-feeding problems for under-twos, and possible shortages in orphanages. Such institutions are however already supported by some ROK agencies, and would not be readily accessible to new aid programs. [§193-7, 204-5, 211]
- xxii. Food security is probably DPRK's "Achilles' heel", with only 17-22% of arable land subject to recurrent droughts and floods. In the absence of accurate data, the situation is currently subject to widely diverging estimates, ranging from a worrying food gap (FAO, WFP) to a much less critical deficit (EC). The focusing of DG AIDCO's cooperation in this sector appears therefore particularly relevant. [§9-10, 192, 207-9]

Sector Strategy Level

This section will include all evaluation criteria except relevance.

Coverage

- xxiii. In accordance with the agreed donors' policy of 'no access, no aid', the north-east provinces of North Hamgyong, Ryanggang and Chagang are mostly not accessible, together with a varying number of counties in the other six provinces, which can be declared off-limits at any time. [§85-6]
- xxiv. Within that framework (which does not concern vaccinations), the supply of basic medical kits to every reachable basic primary healthcare facilities (Ri –rural- and Dong –urban- clinics and hospitals) as well as to the first referral structures (county and district hospitals) has ensured optimum coverage. [§87-9]
- xxv. The coverage achieved by the decentralised production of IV fluid bags in 12 provincial and county hospitals, although of high quality, was much less successful. In all six hospitals visited, the production was at most times not sufficient to cover the hospital's own needs (as stated, IV fluids are often over-used) and less secure 'beer' bottles were also produced in parallel. Furthermore, since sharing with other hospitals is not an usual practice and transport facilities are limited, IV fluid bags were generally not dispatched to neighbouring provincial maternity and paediatric hospitals, where they could have been used for treatment of acutely ill children and women in labour. [§118-120]
- xxvi. The number of disabled persons in DPRK is unknown: a 1998 study mentioned that only 3,5% of the total population were suffering from various types of disability, against 6,5% in China. The same study estimated the number of amputees at 160,000.

- Fourteen thousand of these have so far been assisted, i.a. with the polypropylene prostheses produced by the excellent orthopaedic workshop set up in Hamhung by HI/EUPS 7. [§130-1]
- xxvii. A successful vocational school for 120 deaf and mute children was supported by HI/EUPS 7 in Wonsan. There are seven other similar schools in DPRK, all still hidden in remote rural parts, to which authorities seem quite reluctant to allow access. These schools cover only an estimated 20% of the country needs. [§212]
- xxviii. 24 centres for isolated elderly exist in DPRK, each accommodating between 100 and 200 persons. Out of these, 6 have been assisted by Triangle/EUPS 5 with rehabilitation of buildings, water and sanitation, and medical assistance. Out of an estimated 4,000 persons in the 24 centres, approximately 1,000 have therefore benefited from the project, although it is not known how the selection had been done. Figures, even rough, were not provided regarding how many untreated cases, out of a population of 23 million, may be -or not- on the waiting lists. [§221]
- xxix. The overall coverage achieved by the water and sanitation projects funded in nine county towns and some Ris could only be a 'drop in the ocean'. In three towns (Anbyon, Hoichang, Kujang), the projects could reach the whole population, whilst in others (Munchon, Tanchon) only a portion of the total work has actually been implemented. [§157-9]

Efficiency

- xxx. Like most authorities in DPRK, the MoPH –with whom international assistance has been working for many years- is complicated to approach for implementing partners. Its structure, resources, policy, and even its exact physical location are uncertain; the same is essentially true for the National Red Cross Society (DPRKRC). The main counterpart of EUPS partners and international organisations engaged in healthcare activities (except HI and IFRC) is the Ministry of Foreign Affairs (MFA) through either KECCA or NCC (National Coordination Committee); MFA often appears to be the main decision-maker for external cooperation in the health sector. Such a framework is bound to make effective cooperation rather difficult. [§90]
- xxxi. In respecting the specific functions of the different levels of care, the IFRC approach seems to have been the most coherent and therefore potentially the most effective partner for medical kits distribution. Despite recent restrictions in its monitoring capacity, the IFRC has managed to visit once a year up to 70% of all supplied facilities, against a stated rate of 10-15% for UNICEF. The IFRC opted for a supplementary kit to referral hospitals in addition to the basic kit for clinics. A system of recording book in every IFRC-supplied facility aims at documenting weaknesses in prescribing practice, and addressing them through training courses. With the assistance of DPRKRC, the IFRC has also been able to bypass the provincial level in the MoPH warehousing system. One monitoring visit a year or less is however not sufficient to overcome the often dramatically poor stock management in many clinics and hospitals'

- pharmacies, where drugs with expiry dates in the early 1990s could regularly be seen. [§91-6]
- xxxii. A key added value of UNICEF is to be found in the integrated (and reformed) system of vaccines storage (cold chain), distribution and vaccination campaigns. Shortcomings could however be found at the lower end of the chain. Inadequate upright refrigerators in county hospitals were regularly seen to contain (together with a variety of other items) small quantities of various vaccines, without any temperature sheets or thermometers. [§97-8]
- xxxiii. HI/EUPS 7 is the only NGO partner which does not have the MFA as main counterpart, but a more directly concerned organisation (the Korean Federation for People with Disabilities -KFPD), with very successful results. HI will maintain its support to KFPD with capacity building and assistance to find new funding channels. [§132]
- xxxiv. The efficiency of partners working in water and sanitation projects were mostly commendable, despite constraints (time and negotiating skills required to establish relations of confidence with local authorities, bad communications, material and works sometimes of poor quality, strong time pressure due to DG ECHO's short time frames). Most of the works were carried out by small teams of local technicians and skilled workers, complemented by the mobilisation of the population. Hoichang in particular (Concern/EUPS 3) was an outstanding technical achievement, as some 340 Km of pipes were laid down in record time and in very difficult conditions: isolated area, steep slopes, freezing weather and flooded roads. The professionalism of GAA/EUPS 4 should also be complimented. [§160-4]
- xxxv. Triangle/EUPS 5 has been working from 2004 to 2006 with a local partner, HelpAge DPRK. The organisation has progressed from an Association to a Federation status and has been recognised by the Ministry of Labour. It has however not been as successful as KFPD for the disabled: it has not become a full counterpart, nor has it managed to become a member of HelpAge International; the lack of funds still impacts severely on its sustainability. The sector does not seem to favour transparency either: access to the elderly centres has e.g. been denied to Triangle after the completion of the projects, and in the two centres visited by the evaluation, the sick appeared to have been hidden or evacuated before our arrival. [§220, 222, 244-5]

Effectiveness

- xxxvi. The governmental decision of November 2005 to stop humanitarian aid has severely disrupted the effectiveness of those projects that were not already oriented towards development (HI and PU were less affected). Some partners left the country (ADRA, CESVI), others saw their activities significantly reduced (WFP). Those who remained had generally to negotiate a re-programming of their activities (water and sanitation for Concern, revised medical kits for IFRC and UNICEF), and the NGOs had to integrate the EUPS structure. [§43-5]

- xxxvii. Despite these constraints, the principal objective described in the DG ECHO Decision of November 2006 ("to improve health conditions among the most vulnerable groups in the DPR Korea") has been broadly achieved, partly due to the fact that it was suitably general and non-attributable (see also impact below). [§99, 105]
- xxxviii. Specific objectives were also generally reached (medical kits and vaccines provided, IV fluid units functional, orthopaedic workshop reinforced, water supply projects consolidated and hygiene promotion supported), to the notable exception of components which aimed at enhancing sustainability (below). [§100, 133, 166]
- xxxix. A special note should be made about the second specific objective: "reduce waterborne diseases". Although impact indications are positive on the short term, longer term incidence may become rather more negative as:
- the quality of supplied water and its control by regular and reliable testing is still a recurrent problem; partners often did not have access to local anti-epidemic stations, since these were not a part of the project, they depend from MoPH not MoCM, and authorities generally consider water quality as sensitive or confidential information;
 - newly supplied water is still very much likely to be contaminated by either seeping and overflowing sewage tanks and/or old leaking and rusty pipes, which are still in place e.g. in Munchon and Tanchon;
 - in the absence of wastewater systems³, increased water supply is bound to produce more sewage, which is also likely to seep into the ground from bottomless tanks and/or overflow in the middle of the towns during the rainy season, thereby creating more severe health hazards until solutions can be found - and financed (see also impact).[§165, 169, 179-181]
- xl. Effectiveness and other 'resulting' criteria in water and sanitation are affected by the extremely high standards of water supply defined by the government: every citizen should be entitled to 150-200 litres of (entirely free) drinkable water/person/day. Even for the fully completed projects, dry season levels would generally allow only 60-80 litres. [§167-8]
- xli. Some doubt should be expressed about the effectiveness of the "software" component of hygiene promotion in the short context of a humanitarian Decision. Leaflets and a few training-of-trainers workshops are hardly sufficient to modify behaviours, especially if the training approaches appear to be much more disciplinary than participatory. [§170-3]
- xlii. Among cross-cutting issues, HIV/AIDS still appears to be denied or ignored in DPRK, to the exception of the blood centres where systematic testing was said to be carried out. In the delivery room of the Tanchon county hospital for example, after confirming that "all" tests had been made according to the training received, the doctor in charge

³ Wastewater systems did not exist and could therefore not be rehabilitated, which excludes their funding under DG ECHO's mandate.

replied to our specific question: "HIV/AIDS? No, we never do any such test, there is no HIV/AIDS in DPRK". [§227-8]

Impact

- xliii. Positive impacts of health and water projects were regularly reported by recipients, although almost always by using anecdotal or unsupported statements ("there has been a 'significant' or 'sharp' decrease in the number of diseases"). When figures could be found, their accuracy is generally doubtful and their attribution to the concerned project can sometimes be problematic. [§106-9, 175-6]
- xliv. Essential drugs and medical supplies provided through IFRC and UNICEF were said, in nearly all clinics or hospitals visited, to cover between 60% and 80% of the urgent needs, the balance being generally divided between government supplies (some antibiotics) and traditional 'Koryo' medicine (for prevention and chronic diseases, not emergencies). However, some of the most remotely located rural clinics were also found to be probably the most vulnerable to a disruption in the supply of the basic medical kits, as these clinics seemed to be at the very end of the government's supply line and received very few other drugs. [§74, 101-3]
- xlv. The impact of safe IV fluid PVC bags is difficult to assess. Some hospitals stated that before the project there had been "a few" deaths from acute diarrhoea (Anju). They were also able to increase the number of surgical operations from "3 or 4 per day" to "5 or 7". As before, half of the operations are programmed ones, not emergencies. The treatment of diarrhoea has also become "shorter" and "less painful". [§123-5]
- xlvi. Available data from anthropometric surveys have confirmed reported trends in improved children's growth, an indicator of health and well-being. Statistics for 2004 showed a small but consistent reduction in the proportion of children with severe wasting and an improvement in the level of stunting. A national survey, carried out in 2006 without international support, reported similar findings. The MoPH reported 25,664 hospital admissions for severe malnutrition in 2006 (1.5 percent of the estimated number of children aged less than 5 years). There was no information on rates of recovery. [§194-5]
- xlvii. Numerous impacts can be found in the cooperation between HI and KFPD, i.a.
 - a law on the Rights of the Disabled, adopted in 2003 by the National Assembly; as a result, disabled tend to move more openly, at least in the main cities; 16 disabled were admitted for the first time in 2007 at Pyongyang university.
 - KFPD is now confident enough in their own capacity to e.g. expand their activities to all kinds of disabilities, establish relations with the China Disabled Federation, carry out specialised studies, etc. [§134-6, 217-8]
- xlviii. Impact from the rehabilitation of elderly centres can be found in the enhanced dignity to live in an improved environment, and some additional comfort (water, sanitation, insulation). [§223]

- xlix. Their potential utility of rehabilitated water and sanitation systems as pilot projects may be high in a future development framework. In places benefiting from a rehabilitated water system, a positive impact was generally reported in terms of decrease in diarrhoea cases (“less 2/3, 65-70%”). In Hoichang, cases were said to have dropped by 70-80% in the last two years, which corresponds to the project. According to MoPH figures, 31,309 children under 5 (around 2% of total child population) were admitted to hospital with severe diarrhoea in 2006. A model of low-cost, low-technology rural household latrine introduced by SC-UK/EUPS 2 has been adopted by the authorities and is now being widely replicated. [§175-9]
- l. A regularly reported impact of tap water supply was a decrease in the time needed to fetch water from outside (well, river). Although quite time-consuming, this could hardly be considered as closely related to a humanitarian emergency. Gains in time could also have been somewhat balanced by additional imposed 'social work'. Solid wastes from sewage tanks have e.g. to be emptied by hand by the residents themselves, much more often (“before once every two months, now twice per month”). [§179, 182]
- li. Gravity-fed water supply systems were adopted wherever possible to the (ex-post) satisfaction of local authorities, as these were originally in favour of more high-tech solutions. [§179]
- lii. Indirect, negative impacts include the multiplication of quantities of water used. According to estimates, this may vary from twice the pre-project consumption (GAA/EUPS 4 in Anbyon) to probably much more (“at least five times more water” or “so much water that I could not have imagined it before”, as stated by some beneficiaries). [§180]
- liii. The additional wastewater goes either straight into open ditches (where children can often be seen playing) and then into rivers (where laundry is still regularly being washed), or into inadequate sewage tanks which allow free seepage into the ground and overflow with heavy rains. No covered collectors or treatment plants were ever considered by the government. The capacity of local authorities to deal with the problem is curtailed by the lack of financial support from MoCM. Health impact of increased sewage is hard to assess, but it can undermine the benefits gained from improved water supply. The impact of hygiene training has yet to be seen. [§181-3]

Sustainability

The achievements are, to a large extent, not (self) sustainable in the current situation.

- liv. The health situation may currently be stable, but continued international assistance is crucial pending policy reforms. Both IFRC and UNICEF reported funding gaps for the distribution of their basic medical kits. [§110-2]
- lv. The decentralised IV fluid production depends essentially from the supply of raw materials by MoPH. WHO has accepted to continue providing for recurrent needs with ROK funding, but is reportedly aiming at re-centralising the whole system. This

approach is supported by several directors of production hospitals, who seem to fear a disruption of their supplies. [§126-7]

- lvi. The orthopaedic workshop, perhaps the most widely acclaimed 'success story' of the programme, is itself not yet sustainable. It is based on imported technology, as all the raw plastic materials have to be bought from Europe, together with most spare parts. The search for budget is still an issue. [§114, 137]
- lvii. The sustainability of water supply projects is generally jeopardised in the medium term. Committed local authorities usually lack adequate budgets to maintain water systems. Expensive spare parts must be procured from China, and funds must be provided by MoCM, which has not shown significant support up to now⁴. Even basic quality testing reagents (under MoPH) or chlorine may be in short supply after the end of the projects. Sanitation is still reportedly perceived as a 'humanitarian' issue, which does not fit with development-oriented priorities. This situation may perhaps change – funds permitting- in the framework of the International Year of Sanitation. [§184-7]
- lviii. According to government policy, usage of water must be free of charge, and cost-recovery schemes are not likely to be envisaged in the foreseeable future. [§184]

A.3. MAIN CONCLUSIONS

- lix. The overall situation is quite fragile, potentially on the brink of further crises due to natural disasters, food security or epidemics. Through the lack of data, the international community is rife with contradicting rumours and analyses, which are only met by silence on the Korean side. Except in the case of an early demise of M. Kim Jong-Il (who is 67 years old), a new dramatic famine or some sweeping achievements by the bolder ROK policy, the current situation may quite possibly remain unchanged in the short to medium term. Carried by national pride and tight internal control, the admirably stoic population may just be able to keep the system functional with only the most basic means.
- lx. In that framework and within the limits of what could be accessed and observed by the evaluation, there are currently no conclusive signs of large humanitarian emergency needs in DPRK. The remaining problems and their solutions are firmly within the realm of development. DG ECHO could probably not do anything more in the present circumstances, and is therefore fully entitled to phase out. Consistent advocacy and coordination have resulted in LRRD with DG AIDCO, although only in the Food Security sector. To ensure a measure of overall complementarity, SIDA has been focusing on Health and Water/Sanitation. Most other EU bilateral donors concerned (BMZ, DfID, Irish Aid, Belgian and French Cooperations) have also provided assistance to their national EUPS NGOs.

⁴ DG ECHO has attempted to clarify this issue, by e.g. inviting MoCM to joint field visits, and to the WASH workshop.

- lxi. The transition from countrywide drug distribution to a comprehensive PHC programme is far from complete. The approach of operational partners working with national counterparts outside ministerial structures, especially the IFRC and HI/EUPS 7, appears to be the most integrated and offers some assurance of continuity in the short run. Project sustainability in the long run is determined by the degree of dependency on products from abroad. In the absence of a fundamental change in international relations, external donors will be needed to fund imports. Considering the precarious ties with the ROK, its major humanitarian donor, the continuation of existing projects with alternative funding is not fully assured.
- lxii. All health-related projects are therefore unsustainable to some extent and medicine distribution in particular. An interruption in the supply of basic emergency drugs would cause a further reduction in the quality of health care, which is already low, compared to international standards. Resident organizations need to be alert to signs of a gradual decline in the health care system.
- lxiii. By being led into large urban water and sanitation works which could not, in accordance with its mandate, be extended to wastewater management, DG ECHO has also, to some extent, engaged the shared overall responsibility of the European Commission. Contrary to e.g. medical consumables, such works are supposed to be sustainable by nature. Their results should not bear any foreseeable negative impact for the beneficiaries, although the multiplication of water supplies without proper corresponding wastewater management has *de facto* created potential additional health hazards for the future.
- lxiv. A solution could definitely not be contemplated within the mandate of DG ECHO, nor is the current situation in DPRK favourable for such a task. The local authorities, which were aiming primarily at an increase of the quantity of water supply and have not been overly concerned with its quality so far, are generally quite satisfied. MoCM, which should be in charge of defining a wastewater policy, still badly needs capacity building.
- lxv. The issue should nevertheless not be overlooked in the medium term in the 3Cs framework. UNICEF should e.g. soon start implementing a pilot wastewater project in Yontan, in cooperation with MoCM. Lessons learnt should be disseminated in a seminar scheduled to take place in September or October 2008.

A.4. MAIN RECOMMENDATIONS

- R.1. A general recommendation, which was already an underlying objective of the 2006 Decisions, is to “leave the communication channels open”, directly or indirectly. It might be advisable for DG ECHO not to cut ties entirely when phasing out and to perform regular visits by EC officials of appropriate rank, to complement the presence of the Technical Assistant of DG AIDCO, who is a contracted external consultant. Beyond MFA and where relevant and feasible, contacts should also be maintained with concerned line Ministries.
- R.2. Although health and nutrition conditions seem currently to be stable, DG ECHO should be prepared to respond to emergency appeals for e.g. more medical kits and food aid. The situation may rapidly deteriorate, and may be combined with a damaging attitude of denial-until-it-is-too-late.
- R.3. DG ECHO should also be prepared to respond to emergency appeals for natural disasters, which tend to occur recurrently.
- R.4. DG ECHO should advocate with DG AIDCO, in the 3Cs framework, to consider in due time relevant types of support to MoCM, to help mitigating the possible negative consequences of the lack of wastewater management in past projects.
- R.5. For operating in an environment such as DPRK, humanitarian agencies should make a careful trade-off between i) their own objectives (which must remain closely related to their core mandates and expertise, for accountability purposes), ii) major impediments due to the authorities' agendas (which should be realistically evaluated) and the subsequent lack of independence, and iii) some other relatively minor issues (visibility, names). Appropriate risk management methodologies should be implemented, including e.g. specific LFA, HQ ethical committee, adapted field staff training and communication policy, and exit strategies if core values are broken.

A.5. KEY LESSONS LEARNT

- L.1. Experience has shown that confidence with key local stakeholders is essential for effectiveness, and that this can only be acquired through long-standing and regular relations. In that perspective, there is a need to focus as much as feasible on areas and sectors relevant to expertise and core mandate. More visits would allow better access; the reverse is also true.
- L.2. It should be acknowledged that in countries such as DPRK, humanitarian organisations are either excluded, or they are deemed 'useful' and are therefore generally being *used* for some domestic agenda purpose. This dilemma needs to be clearly understood by NGOs, and related constraints identified in details.

- L.3. Successful approaches would also depend on i) accepting and following the local rules⁵; ii) developing as much as feasible local production instead of importing technology, and iii) using proper semantic/wordings and relations at appropriate seniority levels, on both sides.
- L.4. Once an organisation has left DPRK and suspended key relations, it may be extremely difficult to enter the country again.
- L.5. Although DG ECHO applied optimum flexibility to authorise justified extensions, the standard one-year timeframe did not appear adequate for water and sanitation activities, being far too short, and the project cycle did not fit with local conditions. Contracts should ideally have been signed in October (not January), to dedicate winter months to studies and logistics, and start implementation when the weather improves.
- L.6. The 'WASH' water workshop of November 2007 has appeared as a good example of both accountability and consolidation and dissemination of lessons learnt for further institutional memory purposes, in the true sense of potential follow up and LRRD by other donors and agencies.
- L.7. As a possible matter for overall policy consideration by the Commission in the LRRD and 3Cs context, it may be interesting to note that WFP can use a specific procedure called PRRO (Protracted Relief and Recovery Operation) as a link between emergency (EMOP) and developmental activities. PRRO can also benefit from specific budgets and programmes, which can provide practical means for implementation. This general remark does however not entail that EMOP or PRRO procedures should currently be supported in the particular environment of DPRK.

⁵ This may only be applicable by partners who have the capacity to analyse the situation and negotiate with authorities; a suitable local counterpart; and the possibility to focus on core mandate, despite local agendas.

MAIN REPORT

B.1. INTRODUCTION

B.1.1. Purpose and Methodology

Objectives of the Evaluation

1. As stated in the § 54 to 57 of the Terms of Reference (TOR, see Annex A), the global objective of the evaluation was to assess the appropriateness of DG ECHO's intervention in the Democratic People's Republic of Korea (DPRK) since 2004. As shown in table 1, the total budget for the period considered amounts to some €40,4 million⁶. The bulk of the assistance has consistently been dedicated to health and water/sanitation activities, to the exception of one Decision regarding food aid in 2005, and three emergency Decisions covering a train accident in 2004 and floods relief in 2007. Additional details per sector can be found in tables 2, 3 and 4.

Table 1

Decision	€amount	Type of Aid	Partners
2004/01000	9,100,000	Health	HI, IFRC, WHO, PU, Triangle, Concern, SC-UK, CESVI, UNICEF
2004/02000*	200,000	Emergency relief (train accident)	IFRC
2004/03000*	1,200,000	Emergency relief (train accident)	WFP, UNICEF, ADRA, GAA
2004/04000	6,200,000	Water and Sanitation	Triangle, CESVI, Concern, IFRC, GAA, UNICEF
2005/01000	10,715,000	Health	HI, IFRC, WHO, PU, Triangle, Concern, ADRA, SC-UK, UNICEF
2005/02000	3,000,000	Food aid	WFP
2006/01000	8,000,000	Health, Water and Sanitation	PU/EUPS 1, SC-UK/EUPS 2, Concern/EUPS 3, GAA/EUPS 4, Triangle/EUPS 5, HI/ EUPS 7, IFRC, UNICEF
2007/01000*	2,000,000	Emergency relief (floods)	WFP, IFRC, PU/EUPS 1, SC-UK/EUPS 2
Total	40,415,000		

* Emergency relief Decisions, which are not to be assessed by the present evaluation.

2. The analysis had to focus more specifically on the following issues: DG ECHO's strategy and intervention logic in view of the significant changes that occurred over the period; the achievement of objectives and related impacts; the consistency of funded activities with DG ECHO's broader mandate provisions; and the phasing out strategy / LRRD, in particular regarding DG AIDCO's Food Security budget line.
3. The sectors of *Health, Water and Sanitation* (also the two main axes of the final 18-months Decision of November 2006) were to be assessed in-depth, and to any possible extent, the earlier interventions in the sectors of *Nutrition and Food Aid* (Decisions of 2004 and 2005).

⁶ DG ECHO has been operating in DPRK since the famine of 1995, allocating a total of approximately €120m.

4. The TOR did not require an assessment of emergency relief in case of disasters; this recurrent issue in DPRK will therefore only be considered from the diagonal point of view of possible evolution factors (see §30 below).

Methodology and Team

5. As mentioned in the TOR, the point in time selected to carry out this evaluation (towards the end of the programme, often referred to as 'final' or nearly ex-post) makes it a typical *summative* evaluation⁷ -rather than a *formative* one⁸, which emphasizes its key *lesson learning* perspective. *Accountability* is stated as the second main purpose of the evaluation. Whilst the importance of accountability should always be outlined in humanitarian aid, it comprises several key aspects, some of which may not easily be assessed –or be relevant- in the specific DPRK context (see B.1.3). Other key methodological remarks were made in an Inception Report which had been submitted to DG ECHO as planned, after the first week of field mission.
6. After initial briefings in Brussels and with the Bangkok RSO, field visits in DPRK were carried out between 15th March and 12th April 2008 (see the overall timetable in Annex C). Within the limits of constraints evoked below, the evaluation was given the opportunity to carry out a large range of field visits throughout most accessible provinces of DPRK. Some 4,000 Km were covered in four weeks, which allowed the assessment of an appropriate number of health facilities (nearly 40) and water supply projects (9) to define patterns of findings, conclusions and recommendations. A notable exception was however the distribution of medical kits by UNICEF, for which no consistent pattern could be firmed up.
7. Despite constraints, interviews were conducted systematically with humanitarian and development actors, local authorities and beneficiaries according to a structured questionnaire (already presented in the Annex D to the Inception Report), in order to triangulate and cross-check findings as much as feasible. To emphasise the lesson learning perspective, criteria were preferably approached by using the underlying question “if you had the opportunity to do it all over again, with hindsight, would you do the same...?”
8. The evaluation team was made of two consultants, who have drafted parts of this report according to their own sectors of expertise:

-Michel Van Bruaene: Team Leader, Water and Sanitation, Food Aid sectors, strategy and cross-cutting issues, and

-Dr Danielle Deboutte: Health (support to healthcare facilities, IV fluids, orthopaedic workshops, blood centres, hygiene) and Nutrition sectors).

⁷ An evaluation conducted at the end of an operation -or a phase thereof- to determine the extent to which the planned results were produced. A summative evaluation is intended to provide information/lessons about the value of the operation – ALNAP.

⁸ An evaluation intended to improve performance, most often conducted during the implementation of an operation - Ibidem.

B.1.2. Background

9. The TOR have adequately summarised the most recent events which have created tensions in the relations between DPRK and the international community. The country has a population of approximately 23 million and a surface of 120,540 sq. Km, out of which only a minor part are arable lands⁹. It is divided into three main cities (Pyongyang, Nampo and Kaesong), nine provinces and 204 counties. The Korean peninsula is sitting on one of Asia's main political fault lines. It has been for centuries both a buffer zone and a foothold for invasions between China and Japan; since 1953 it has also become an important border area for the American and Russian spheres of influence. A map can be found in Annex B.
10. After the collapse of USSR in 1991, the archaic socialist-type economy, focused on military expenditures¹⁰, was not in a position to withstand the end of the Soviet assistance. President Kim Il Sung died in July 1994, leaving a political vacuum, which combined with three years of climatic calamities (floods, drought and tidal wave) between 1995 and 1997. A disastrous famine ensued, and humanitarian agencies were allowed to step in, although with severe constraints in matters of e.g. access and monitoring.
11. After a few years, the food security situation gradually improved, and the authorities decided suddenly at the end of 2005 to put an end to humanitarian aid and to replace it by development-oriented programmes. This measure, which had a crucial impact on DG ECHO's funded activities and strategy, will be further commented below (§31).
12. In parallel, the relations between the regime and the international community have been subject to repeated crises due to e.g. the development of nuclear weapons or the denial of human rights by DPRK. The overall situation remains quite fragile. Every observers agree that DPRK is a country “on the edge”, but the question is “how far on the edge?” Through the lack of data, the international community is rife with contradicting rumours and analyses, which are only met by silence on the Korean side.
13. Except in the case of an early demise of M. Kim Jong-Il (who is 67 years old), a new dramatic famine or some sweeping achievements by the bolder policy of the new president of South Korea (ROK), the current situation may quite possibly remain unchanged in the short to medium term, perhaps even for the coming decade. The regime will probably be seeking to maintain tight internal control and hard external bargaining for any overture in negotiations. Carried by national pride and under strict surveillance, the admirably stoic population may just be able to keep the system functional with only the most basic means: mass human labour, bicycles, a few oxen dragging old wooden carts, and traditional medicine. The lack of technical resources, outside the capital and the main cities, may

⁹ 17% of arable land according to Government sources, and 18% according to WFP; the UN inter-Agency appeal of 1998 mentioned 22% of arable land.

¹⁰ It is estimated that the government spends 30% of the nation's GDP on the military, and has recruited 1.2 million of the healthiest young men into the army. In comparison, total health expenditures in 2001 represented only 2.5% of the GDP –according to WHO.

actually have made the country to a certain extent less vulnerable to some aspects of crises, although definitely not to floods and other threats to food security, or to epidemics.

B.1.3. Constraints

14. A brief description of key constraints is a well-established practice in evaluations. In the present case, the constraints chapter will have to be somewhat more developed and explicit than usual.
15. Evaluating –and implementing projects- in DPRK is a challenging task. As noted by the 2004 evaluation (see below): "Restrictions on information and data gathering make objective assessment of humanitarian needs exceptionally difficult in DPRK". The local "socialist" culture does not seem able to assimilate the underlying purpose of evaluating, which is to learn from successes and failures. Local stakeholders and beneficiaries, although invariably very courteous and despite repeated attempts to explain the evaluation philosophy, will ultimately always try to demonstrate that their achievements were flawless "despite our problems". Disturbing facts will be consistently ignored or denied "Is there any soap for hand washing? Yes, it is locally produced. But we do not see any; is there enough soap? Supplies are organised by the government, so it is being taken care of").
16. Data collection in DPRK is dominated by politically correct declarations at all levels. Every interview was always carried out in the presence of representatives of KECCA (Korean Cooperation Coordination Agency –see §21) and a number of members of the local People's Committee, who listened carefully for any deviation in the official line. Vague and generally positive statements, unsupported by evidence, are the rule ("the project led to a 'significant' decrease in the number of diseases. No, there are not yet any figures").
17. There is a universal lack of conclusive or comparable figures, baseline data and usable statistics. When figures are provided, these may amount to being planning figures rather than actual needs or expenditures. Data are probably available at the central level, but may not properly be used and are certainly not disseminated. As a result, the figures mentioned in this report should be taken with due caution.
18. There is also a constant lack of access to locations, to information, or people who could give them. The number of counties that are officially accessible to international agencies is ever shifting and has currently been reduced to 135; the notion of "access" itself in such places has to be qualified (see also §46 and 226). Three provinces in the North-East (North Hamgyong, Ryanggang and Chagang) have been completely closed to agencies, the official reason being that it is not "cost-effective" for foreigners to travel to such remote places¹¹. The humanitarian vulnerability in these provinces is unknown.
19. Agencies have all agreed to apply the principle of "no monitoring, no aid". However, when monitoring is possible (numbers of staff are much limited by authorities), visits cannot be

¹¹ Exceptions were made for UNFPA (census purposes) and PU/Unit 1 (IV fluid laboratory in Chongjin).

made unexpectedly and are strictly limited to the projects implemented by the monitoring organisation (e.g. a specific warehouse, some parts of a hospital). As for any other international staff, our field visits had to be meticulously planned at least one week in advance, which means that all institutions to be visited had ample time to prepare themselves and to show us only what they wanted to show. As a result, premises had sometimes been freshly re-painted and toilets could sparkle like showrooms in sanitary shops. Unexpected demands (e.g. in a IV fluid production hospital, to pay a short visit to the medical departments where the fluid would be most useful, for impact assessment reasons) might be sometimes accepted, and in other cases denied (“this is not according to the plan!”).

20. As the numbers of authorised international staff are generally too limited to manage projects all by themselves, many activities are performed, tightly controlled, and sometimes "suggested" by national staff, designated by the authorities in charge. These staff, of various levels and skills, have generally access to most key project documents. In such a context, the principle of independence of humanitarian actors is essentially a farce. The concepts of e.g. accountability towards recipients and ownership are also largely irrelevant, as they have long been *de facto* achieved. Human Rights, although not a part of our TOR, are blatantly ignored, even though they are the major underlying concern of the whole humanitarian action. Principles will be further commented below (B.2.1.5).
21. In addition – and quite perversely - the north Korean society is vertically compartmentalised, often preventing coordination and horizontal/cross-cutting linkages, even between counterpart services. As an official of MoPH phrased it, national institutions are separated by “fences”. All EUPS Units (except HI/Unit 7) have the KECCA (a service of the Ministry of Foreign Affairs - MFA) as their main counterpart, which either prevents contacts with responsible line Ministries, or gives its own instructions to said Ministries. International organisations (except IFRC) report to the NCC (National Coordination Committee), another MFA service. The two services do not seem keen to cooperate.
22. As a result, the findings of this evaluation –as we can only state patterns of facts that have been positively identified- are mostly bound to be what the authorities would probably like them to be. These patterns are sometimes complemented by isolated but plausible information, which we have treated to the best of our ability. There were many other estimates and guesses, often too conflicting to be reported here. DPRK is also a place where rumors can easily be fed into an information-starved and tiny expatriates community.

B.2. MAIN FINDINGS

B.2.1. Global Strategy

B.2.1.1. The DG ECHO-Funded Evaluation of 2004

23. A DG ECHO-funded external evaluation was carried out for the first time in DPRK in October-November 2004. Its objectives were to assess the appropriateness of interventions since 2001, and to provide recommendations for improving effectiveness in the future. The evaluation report was published in January 2005.¹²
24. The evaluation generally assessed DG ECHO's various activities as 'relevant' and 'appropriate', stating in particular that "... (the) three broad sectors (health, water and sanitation, and nutritional support/food aid)... relate to the health status of the population and are fundamentally interrelated; moreover interventions in these areas can be mutually reinforcing". Some sectors in particular were favourably considered: "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)". "Drinking water supply provision has been a large and successful area of ECHO support... The evaluation supports the continuation of ECHO's programme in DPRK, broadly along current lines"¹³.
25. A few issues for concern were also outlined. "Humanitarian programmes are greatly hampered by restrictions on access and data-gathering and the secrecy or unavailability of even basic information"; "(there is) uncertainty as to when the government will be able to take over (provision of essential drugs)"; "Sustainability (of IV fluid production) may be problematic"; "Impact (of water supply) has been often offset by the absence of wastewater management.... Assessment is greatly hampered by the lack of data on water quality". These issues are still among the most negative findings of the present evaluation.
26. Among factors of changes (see below), the economic reforms of 2002 had been perceived as potentially damaging for the most vulnerable, who could not adapt to the new market-oriented trends. "The economic reforms of 2002 have created winners and losers, extending the ranks of the vulnerable".

¹² http://ec.europa.eu/echo/pdf_files/evaluation/2005/DPRKreport.pdf

¹³ This recommendation, which had reportedly been adopted after some internal discussions, was nonetheless mitigated in the report by remarks such as: "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".

27. In accordance with the recommendations of the evaluation, the bulk of DG ECHO's humanitarian assistance was maintained in DPRK through Decisions 2004/01000 and 04000, and 2005/01000 and 02000.
28. The 2004 evaluation had however already noted indications of a change in the national policy towards humanitarian aid, which would ultimately lead to its interruption a year later. "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".
29. The present evaluation will attempt to build upon the findings and conclusions of the previous one, in a perspective of continuity, accountability and lessons learning.

B.2.1.2. Factors of Change

30. The assessment of the evolution of the humanitarian situation in DPRK over the period concerned should be done most appropriately by using as judgment criteria the five key events which have probably most impacted on the humanitarian -and the overall- situation in DPRK in recent years. These events will be treated as *diagonal factors* in the assessment of the three main evaluation concerns laid out in §55 of the TOR (evolution of situation, impact of interventions, and phase-out strategy). These events or factors of change can be listed as follows, by order of importance.

The DPRK Government's Decision to Cease Humanitarian Aid

31. Following some earlier indications (§28), the authorities had formally advised DG ECHO and other international donors at the end of August 2005 that DPRK no longer needed humanitarian assistance in food aid and drugs supplies, that such operations should cease by the end of the year (but rehabilitation could continue), and that NGOs should leave. DG ECHO's own analysis at the time had also shown that the worst of the humanitarian crisis seemed to have been overcome. A significantly hardened position was announced to DG ECHO by the MFA in early November 2005, during a field mission. It was stated that the country could no longer accept EU funding (both from DG ECHO and AIDCO Food security) due to the Human Rights Draft Resolution proposed to the UN General Assembly in October. All activities had to cease by 31st December, and NGOs were no longer allowed to work in DPRK. Consequences for UN humanitarian agencies were similarly severe. Consolidated Appeal Processes (CAP) could not be carried out any more. OCHA, the principal coordination body, had to leave the country. WFP had to close all of its sub-offices; monitoring stopped.

32. DG ECHO was faced with a critical dilemma, and most partners were in disarray. The government's position gradually evolved, however; a suspension period of 3 months was declared, and negotiations took place (see chapter B.2.1.3).

Recurrent Natural Disasters

33. DPRK is subject to nearly annual natural disasters. Some of the main factors for the catastrophic famine of the mid 1990s were three successive years of climatic calamities (floods, drought and tidal wave) in 1995, '96 and '97. Although the assessment of disaster response is not a part of our TOR, the floods of August 2007 had e.g. detrimental impacts on most projects, delaying logistics or works, or destroying some of the components. Among other problems, there was a temporary lack of local manpower in Kujang, Sinhung and Tanchon due to the massive mobilisation of the population for repairing various damages in the towns; project pipes were washed away; a pumping station had to be rebuild in Hoichang.
34. Standard DIPECHO procedures are prevented in DPRK by the lack of access to local communities and travel restrictions. DG ECHO envisages to negotiate some form of standby agreement (i.a. without having to undergo protracted visa procedures) which may allow rapid intervention from e.g. the Regional Support Office in Bangkok.

The 2006 International Sanctions

35. In October 2006, the UN Security Council adopted a Resolution condemning a nuclear test which had just been carried out in DPRK. The Resolution banned the export of goods, technology and technical assistance which could contribute (even in a dual-use form) to nuclear-related programmes; it also banned procurement from the country, the export of luxury goods to DPRK, and froze financial assets. The UN Resolution was backed by an EU Council Regulation in March 2007¹⁴. These sanctions are linked to progress in the “Six Party” talks on denuclearization; they may not be lifted soon, as critical deadlines are regularly being ignored.
36. These sanctions had mostly some indirect impacts on the management of the projects, as cars and spare parts became even more scarce (authorities decided to impose their own ban on imported Japanese cars), transfers of funds were more difficult, and fuel prices rose even more sharply. Imports of crude oil are at their lowest, which is bound to have some effects on recurrent power cuts affecting e.g. the hospitals. According to the MoPH, the sanctions impacted also on financial transfers made by the Ministry, and on its ability to support e.g. the local production of medical items.

¹⁴ Council Regulation (EC) n° 329/2007 of 27 March 2007.

The 2002 Economic Reforms Package

37. According to an analysis¹⁵, these reforms were relatively timid, but have had long-ranging consequences that can still be strongly felt. Their origin can probably be found in the growing failure of the Public Distribution System (PDS) to provide core basic rations to all citizens (300-600 grams/cereals/day/person, depending upon persons' status). Reforms included i.a.: the authorisation of private markets¹⁶ and a focus on profit; the four-fold increase of food prices and decrease of housing and fuel subsidies; the huge devaluation of the Korean People's Won (KPW) from 2.16 KPW to 153 KPW to the US\$; the adoption of the Euro as the official foreign currency; and the possibility for Chinese companies to set up joint ventures which could import many products. In parallel, key social services to the more vulnerable were said to remain unchanged, but the decline of most national industries could hardly afford the funds to sustain these aims. The economic measures may have been "revamped" to some extent in 2005-2006 (some prices may have been fixed and some salaries increased), although no details are known for certain.
38. The reforms were a key matter of concern for the 2004 evaluation. "The loosening of price controls has increased the vulnerability of groups whose incomes have not increased accordingly". Salary levels are indeed estimated -there are no published figures- at between 5,000 and 25,000 KPW per month, or 1 to 5 Euros at the unofficial exchange rate of 4,500 KPW.
39. It is not possible to assess whether such disparities may have amounted to a major issue over the concerned period, during which a relative stability of the food situation could be found. Private markets are not accessible to foreigners, except one in Pyongyang. The main cities, where foreigners are allowed to stay, may have a significant proportion of relatively privileged categories. In rural areas, barter seems often to be used instead of money. Some marginal lands are reportedly cultivated by former workers, laid off from semi-closed plants. Sharp increases in food prices, seasonal or structural, are bound to enhance disparities again.

The new ROK Cooperation Policy.

40. The Republic of (South) Korea (ROK) is probably by far the largest donor to DPRK, as the amounts of Chinese investments are not published. ROK is e.g. providing some US\$20 million to WHO for a large health rehabilitation programme of emergency and delivery rooms, laboratories and blood centres (30 county hospitals were covered in 2006 and 30 more in 2007). Lessons learnt from DG ECHO-funded projects were used in this context.
41. Although it can potentially become a rather powerful factor of change, actual details regarding the tougher policy promoted by the newly elected ROK President were still mostly unclear when this report was being drafted. The extent to which ROK authorities

¹⁵ Based on MFA briefings and various assessments by international actors, see e.g. UNICEF "Analysis of the Situation of Children and Women in DPRK".

¹⁶ "Kitchen gardens" were authorised on a surface of only 30 pyongs (1,7 X 1,7 m), or +/- 97.2 square meters per household.

may be prepared to enforce the policy are also unknown as yet. The policy has therefore been placed at the last place in this list.

42. In broad terms, Mr Lee Myung-Bak, who took office in February 2008, has declared that he would be aiming at "extending comprehensive assistance to help Pyongyang stand on its own feet economically, once the North settles the nuclear problem and acts to change decisively". He is in particular willing to "get actively involved in the effort to help raise the North's per capita GNI to US\$3,000 when certain conditions are met". Early rumours concerned delays in supplying food aid and much-needed fertilizers to DPRK. Humanitarian aid should however not be affected. Asked for example about continuing food and other humanitarian assistance to Pyongyang, the new South Korean foreign minister stated that providing large supplies of food each year is "not 100 percent humanitarian", adding, "But if there is big necessity in North Korea, I think we have to provide food aid without any conditions." In March, the Ministry for Unification also declared that "ROK could halt large-scale aid shipments if Pyongyang doesn't move to end its nuclear weapons programmes".

B.2.1.3. The Response of DG ECHO

43. As stated, the strategy to maintain the bulk of the assistance was curtailed by the government's decision to cease humanitarian aid at the end of 2005. A few of the partners (ADRA, CESVI) left DPRK. The others suffered from a number of negative impacts: they had to scale down, prepare exit plans, manage a 6-months gap¹⁷ in programming, follow up and field visits. The latter arose much suspicion from local counterparts "they are gone...". The drop in confidence had to be mended.
44. The official position gradually appeared to soften somewhat, and preliminary negotiations led by the ECHO Technical Assistants were able to define an interim period of three months, until the end of March 2006, during which activities would be suspended. A joint DG ECHO-RELEX mission took place in early February. A new modus operandi was finalised in June, which reactivated some of the DG ECHO-funded projects in the framework of the European Union Support Programme (EUPS).
45. EUPS activities were oriented towards development rather than humanitarian aid. Four sectors were originally considered (agriculture/forestry; capacity building; health; water and sanitation), although in practice only health was ever used. The remaining European NGOs were reorganised in six autonomous Units, under which they would be granted the same "privileges" as before although without being authorised to mention their organisational identities. The EUPS structure and tasks were as follows.
 - Unit 1 (Première Urgence -PU): IV fluids production supply.

¹⁷ DG ECHO has the flexibility to use "suspensions" when the operational context does not enable the partners to implement their activities to a maximum of 1/3 of the duration of the grant agreement. Under the suspension period, costs of essential staff (expatriate and local) and office costs are considered eligible. For all partners who requested the implementation was suspended in December 2005 and activities were resumed in April 2006.

- Unit 2 (Save the Children – SCUK): integrated health and water/sanitation projects in Tanchon, Sinhung, etc.
- Unit 3 (Concern): water and sanitation projects in Hoichang and Dokchon.
- Unit 4 (German Agro Action -GAA): water and sanitation projects in Kujang, and later in Anbyon.
- Unit 5 (Triangle): support to isolated elderly.
- Unit 6 (Triangle): water and sanitation in Munchon. Unit 6 was merged into Unit 5.
- Unit 7 (Handicap International – HI): support to the disabled.

For clarity purposes, this report will systematically mention both the NGO names and their respective EUPS Unit numbers.

46. Another option would possibly have been for DG ECHO to leave the country. This would however have left a number of projects uncompleted, and may have damaged both the partners and the image of the European Commission. It was therefore decided in November 2006 to fund one last ad hoc Decision of 18 months (2006/01000) which would allow to finalise activities, "sortir en beauté" and let the partners consider their own exit strategies. In doing so, DG ECHO considered its position as a RELEX Service of the EC, and engaged into consistent advocacy and coordination with the concerned EC services and EU member states, towards LRRD. These efforts resulted in the adapted strategy of DG AIDCO in Food Security (below).
47. The impacts of the decision have been positive, which confirms the validity of the option. The image of DG ECHO and the EU is high in every project. This is due to the quality of the partners who have remained, and also to the (partly forced due to access restrictions) increased focus on some areas and towns with corresponding high cooperation, a key to success in DPRK. Implementing partners could be provided with opportunities to continue being funded under the Food Security programme, without counterproductive gaps. DG ECHO was in a position to respond with the required rapidity (Decision 2007/01000) to the devastating floods of August 2007.

B.2.1.4. The 3 C's (Coherence, Complementarity, Coordination) and LRRD

Coherence with EU Policies – LRRD

48. An open call for proposals was launched in January 2008¹⁸ by the Food Security programme of DG AIDCO, the only programme of the Commission in DPRK after the departure of DG ECHO on 15th May. The budget of the tender is €8 million, and the deadline was set for mid-March. Results had not yet been published when this report was drafted. Although open to all, one of the objectives of the tender was to provide some LRRD opportunities to the NGOs involved in the EUPS structure. "The global objective of the EC 2007 Food Security Program (LRRD component) in the DPRK is to link past emergency aid to rehabilitation operations in a (normally limited) 'post-crisis period'... The Food Security Program will provide temporary support to shift from relief

¹⁸ <http://ec.europa.eu/europeaid/cgi/frame12.pl>

to rehabilitation (in view of, later, development) thus avoiding a relapse into food emergency situations".

49. In this framework, former partners of DG ECHO were encouraged to find new "niches" –if they so wished- in order to help maintaining a bare minimum of EU implementation presence in DPRK. The tender is dedicated to food security only, but its actual scope is rather large in the framework of assisting "rural communities development".¹⁹ This could include a large number of related topics, from e.g. water and sanitation to basic education, health, and support to women and children. Themes covered i.a. water management schemes, pest management, alternative energies, fertilizers, hill farming, or agro-forestry.
50. This tender follows earlier projects focusing on e.g. imported tractors and support to farm mechanisation (2004-5). A first call for proposals oriented towards development was launched in 2005, initiating two projects to be carried out between 2006 and 2009 with EUPS partners (maize seeds by GAA/Unit 4 and sea dyke rehabilitation by Triangle/Unit 5). Another (smaller) tender for farm equipment is being prepared.
51. Most EUPS partners (PU/Unit1, GAA/Unit 4, Triangle/ Unit 5 etc) evoked their plans to take part in the AIDCO tender. GAA/Unit 4 has e.g. made a large number of proposals, including:
 - alternative sources of renewable energy in rural areas (solar, biofuel, geothermal...);
 - hydroponic (soil-less greenhouses) vegetable production in urban areas;
 - vegetable production on tarred backyards in urban areas;
 - extension of sloping land management;
 - revitalization of the fruit plantation sector, etc.
52. In their own strategies to bridge the funding gap left by the departure of DG ECHO, the EUPS partners have also increased their efforts towards their respective national cooperation agencies. SC-UK/Unit 2, Concern/Unit 3 and HI/Unit 7 have approached DfID, Irish Aid, or the Belgian cooperation. GAA/Unit 4 is already getting some €2 million from the German cooperation (BMZ) for food and agriculture projects, and should receive Norwegian funds for continuing its water and sanitation activities. A support to PU/Unit 1 was announced by the Direction Humanitaire of the French MFA in April 2008. Nearly every EUPS Units (1, 2, 3, 5 and 7) will furthermore receive some funding from SIDA (see below).
53. In a wider LRRD perspective, it should be noted that the imposed name of EUPS may have some detrimental consequences on the capacity of the partners to find funding opportunities out of the EU framework. Negative replies were for example received from the Australian Cooperation agency, which seemed to consider that the brand was too strongly connected to the European Union ("it is their scheme, we do not have to be

¹⁹ "The Food Security Programme aims at improving the living conditions of the social groups which continue to suffer most from the deterioration of the national socio-economic conditions. It is supposed to overcome persistent technical and organizational deficiencies and deficits which cause unstable availability, distribution and use of food by these target groups".

involved in this”). Comparable reluctance could be found with other non-EU bilateral donors, such as Canada. This may be an indirect negative impact of the 2005 decision.

Complementarity with EU Member States

54. Among EU member States, Sweden has had by far the most active bilateral cooperation agency (SIDA), with funding broadly equivalent to the sum of all other countries. Sweden has also the longest standing relations with DPRK (35 years) and does not seem willing to abandon this position, which provides some very valuable insights. Sweden was e.g. instrumental in finding a solution for the 2005 crisis. In December 2005, a Swedish mission visited DPRK and came up with the conclusions that humanitarian aid could probably be continued in some form. These results were useful for the Commission's joint visit in February 2006.
55. Until 2007, SIDA policy aimed at following DG ECHO and complementing its activities. In this sense, DG ECHO's withdrawal was perceived as a gap in the EU complementarity, but SIDA is aiming at adapting its strategy accordingly, with limited resources. In SIDA's views, DG ECHO's departure is leaving both a thematic gap – the scope of activities being reduced to Food Security- and a chronological one until DG AIDCO funds become available, probably at the end of 2008
56. SIDA will therefore be phasing out of agriculture and food security (the only sector supported by DG AIDCO), and focus on the two pillars of health and water/sanitation, targeting the most vulnerable. SIDA will for example stop funding FAO, to which Sweden was the main donor in DPRK with €900,000 annually; this may leave another gap, as FAO did not appear able to find a substitute donor so far. In April 2008, SIDA accordingly published the following decisions.
 - SEK 9 million would be committed in 2008 for food security and health through SC-UK/Unit 2, Triangle/Unit 5 and HI/Unit 7.
 - SEK 8 million would be funded to support basic hospital rehabilitation and water & sanitation, to be divided between PU/Unit 1 (SEK 4 million), SC-UK/Unit 2 (SEK 2.1 million) and Concern/Unit 3 (SEK 1.9 million).
 - SEK 7 million would be attributed to the Swedish Red Cross (IFRC) for the distribution of essential drugs and basic medical equipment to PHC facilities.
 - SIDA would in addition maintain its funding to UNICEF (€700,000) and WHO (€650,000).

Co-ordination Issues

57. After the departure of OCHA at the end of 2005, another key actor in the coordination of international assistance, UNDP, decided to leave the country in March-April 2007. The main reason seems to have been some dispute with the US administration, as UNDP was reportedly accused of having used some accounts owned by the DPRK government for their operations (which is not abnormal). WFP has since been assuming the UN coordination role ad interim. It should be noted that the representatives of key embassies are also part of the coordination structure.
58. Coordination in the Food Security sector is well established. It is implemented through:
- weekly aid agencies meetings;
 - monthly meetings of the Food Security working group;
 - quarterly meetings of the "Green Table Group" regarding specific agricultural issues.
59. The main national counterpart of DG AIDCO activities will be, as for DG ECHO, the MFA through KECCA. Although this service ensures that no duplication takes place, it seems again to be giving instructions "vertically" in the Food Security sector to concerned line Ministries such as Agriculture and the Ministry of Land and Environmental Protection. It should also be noted that the resident Technical Expert of DG AIDCO, the only EC representative left in DPRK after the phasing out of DG ECHO, is a consultant working for a subcontractor, and not an EC official.

B.2.1.5. Humanitarian Values

60. Ensuring that humanitarian values and principles are acknowledged and applied in DPRK has been recognised as a major challenge by all actors involved. As the 2004 evaluation had put it: "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".
61. In particular, the principle of *independence*²⁰ appears to be quite problematic to apply satisfactorily in a framework of distorted political priorities and subsequent lack of information, transparency and access. Some actors (e.g. MSF in 1998²¹) have decided to leave the country since they could not fully apply their principles. Others have stayed to assist those who could nevertheless be reached, even with severe constraints. "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" (2004 Evaluation).

²⁰ The autonomy of humanitarian objectives from the political, economic, military or other objectives that any actor may hold with regard to areas where humanitarian action is being implemented. See e.g. the Good Humanitarian Donorship (GHD) principles endorsed by DG ECHO after the Stockholm conference of June 2003.

²¹ In 1998-2000, working and access conditions were reportedly even more distorted than today.

62. The 2004 evaluation was quite supportive to the decision of DG ECHO to maintain its presence: "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"... "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". The evaluation further believed that DG ECHO had a role to play in promoting humanitarian principles: "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".
63. In doing so however, and particularly after the government's decision of 2005, DG ECHO's mandate and strategic assessment tools were stretched to their very limits. The Global Needs Assessment tool (GNA)²² had for example placed DPRK at the 20th position among the most vulnerable countries in 2005, based essentially on OECD economic figures (which outline the structural nature of the situation) and on the importance of natural disasters. In the 2007 GNA, DPRK was moved down to the 88th position, which fully supported DG ECHO's phasing out. In some cases (IV fluids, water and sanitation), activities spanned almost the entire 'grey zone' up to the far edge of pre-development though without firm LRRD commitment, with inconclusive effects in terms of e.g. sustainability (see §126-7, 184-7).
64. The notion of *access* has several aspects in DPRK. At the overall level, authorities are much reluctant to allow unrestricted access to independent humanitarian actors. The generic term of Non Governmental Organisation itself is perceived negatively. At the operational level, access –when it is authorised- has to be duly qualified. UNICEF provided the following definition: "countries where agencies felt confident that, if they require access to facilities (i.e. only the very places where the relevant projects are being implemented), it would be granted".
65. The TOR acknowledge this issue and emphasise the solution adopted: "In this context, DG ECHO and the organisations working for this programme have signed with the relevant North Korean authorities (National Red Cross, Korean Federation for Supporting the Disabled “KFPD”, Ministry of Health, Ministry of City Management), a specific Letter of Understanding (LoU) covering each DG ECHO funded operation. The LoU includes a detailed “EC clause” on the need to meet the above mentioned humanitarian standards. *"No assistance is provided to any areas where access for monitoring is not granted. This means that if municipalities deny access for monitoring, the aid is suspended."*(§37).
66. The new "European Consensus on Humanitarian aid"²³ insists on the fact that EU humanitarian aid should be provided "wherever the need arises if governments and local actors are overwhelmed, unable or unwilling to act".. and encompasses i.a. "actions

²² Details concerning DG ECHO strategic methodologies including GNA can be found on its website: http://ec.europa.eu/echo/information/strategy/strat_rep_en.htm

²³ See http://ec.europa.eu/echo/pdf_files/booklets/consensus_EN.pdf

aimed at facilitating or obtaining access to people in need and the free flow of assistance". The second part of the statement may be relevant even in extreme cases such as e.g. Darfur, but not when the government which denies access happens also to maintain one of the largest standing military forces in the world. Although needs may arise and people would then have a right to received humanitarian aid, in the absence of official request for assistance or open conflict, options at that level are limited to protracted efforts of joint dialogue and advocacy by the international community.

67. *Humanity* is also probably one of the worst affected principles in the unique DPRK context (see e.g. §225). Humanity is closely related to the Human Rights themselves, the very basis of humanitarian aid, which are blatantly ignored in the country. *Impartiality*²⁴ is less of an issue (except for those hidden by the authorities such as the handicapped and isolated elderly), as most categories and genders are equally affected by government decisions. *Neutrality* is not highly relevant in a non-conflict situation.
68. It should be acknowledged that in countries such as DPRK (a situation which is also valid e.g. for Burma/Myanmar), humanitarian organisations are either excluded (NGOs tend to be highly suspect by nature), or they are deemed 'useful' and are therefore generally being *used* for some domestic policy purpose. This dilemma needs to be clearly understood by NGOs, and related constraints identified in details. The status of international organisations and UN agencies may also be ambiguous, since they are both protected and restricted by their global –and consequently mostly neutral- mandate.
69. *Accountability* is stated as the second main purpose of the evaluation, after lesson learning (§54, 56). Whilst the importance of accountability should indeed always be stressed in humanitarian assistance, it encompassed several key aspects, some of which may not easily be assessed –or be relevant- in the specific DPRK context.
70. As emphasised e.g. by HAP-I (the Humanitarian Accountability Partnership), accountability in humanitarian situations should encompass the full scope of its traditional definition²⁵. In that perspective, accountability should primarily be understood as directed towards beneficiaries, to help them understand how aid money has been spent in their favour, and so enhance ownership. In DPRK however, the usually favoured direct contacts with final beneficiaries can be very problematic if not impossible. Local authorities have already an overwhelming power of control on the implementation –and sometimes design- of projects. This is complemented by the fact that every local staff involved in project management, administration and finance is also designated by the authorities, with direct access to most relevant documents. A *de facto* complete accountability towards the recipients has therefore arguably been achieved.
71. The other key aspect of accountability is directed towards the donors. In the specific context of DPRK, the capacity of the partners to achieve the required levels of

²⁴ The implementation of actions solely on the basis of need, without discrimination between or within affected populations.

²⁵ Accountability is a measure of the quality of the relationship between an agent (a body offering a service or product) and a principal (the person or group for whom the service or product is intended) – Webster.

management competency and internal transparency for delivering acceptable reports is – sometimes to a significant extent - restricted by the lack of independent international staff (their numbers are strictly limited), the lack of access and monitoring, and the sometimes uneven management skills of the designated local staff who actually manage most project activities.

Recommendations

For operating in an environment such as DPRK, humanitarian agencies should make a careful trade-off between i) their own objectives (which must remain closely related to their core mandates and expertise, for accountability purposes), ii) the authorities' agendas (which should be realistically evaluated), iii) the subsequent lack of independence, and iv) some other relatively minor issues (visibility, names).

Agreeing to work in a sector that is not one's core mandate as an 'entry point' may not be an effective strategy if the authorities' own objectives are not sufficiently compatible.

A risk management strategy must be set up. Specific LFAs should be prepared (in proposals to donors and confidential reports to key stakeholders), with clearly defined objectives, assumptions and risks, as well as 'red lines' that are not to be crossed. At HQ management level, an ethical committee should be set up, to review the situation periodically. Field staff must also be fully aware, trained and competent; strategies must be continuously pursued and updated to improve access, information, and advocacy with local counterparts where feasible. Finally, if the situation deteriorates beyond the 'red line' limits, the agency should be prepared to suspend or stop its activities for the sake of respecting its core values and its accountability. Donors and stakeholders should also be prepared to accept such events and respect the agency's decision, which should not have any detrimental consequences on image or funding.

Issues of access, either at the overall/political or at the operational levels should not be discussed separately, but in close coordination with every other major actor involved. The LoU should be seen as an example of good practice in this field.

B.2.2. Health Sector

Summary table 2

Year	Partner	Contract n°	Amount (budget)	Activities
2004	HI	01001	€0.5m	Support to disabled
	IFRC (DK)	01002	€3m	Supply of essential medicines to 2,100 facilities
	WHO	01003	€1.13m	Improving services in 12 county hospitals
	PU	01004	€0.9m	IV fluids
	Triangle	01005	€0.31m	Support to elderly
	Concern	01006	€0.21m	Support to rural health facilities in Pukchang
	SC-UK	01008	€0.8m	PHC in S. Hamgyong and N. Pyongan
	CESVI	01009	€0.28m	Health services in Pangyo and Wonsan
	UNICEF	01010	Approx. 50% of €1.8m	(project component) supply of 6 months of essential medicines in 2,645 health facilities
	UNICEF	04007	Approx. 25% of €2.15m	(Project component) TA support to 2,500 health facilities
2005	HI	01001	€0.6m	Support to disabled
	IFRC (DK)	01002	€2.7m	Supply of essential medicines to 2,279 facilities
	WHO	01003	€1m	Improving services in 15 county hospitals
	PU	01004	€1m	IV fluids
	Triangle	01005	€0.52m	Support to elderly
	Concern	01006	€0.45m	Support to rural health in Hoichang, Dokchon
	ADRA	01007	€0.04m	Rehabilitation to 5 hospitals (terminated early)
	SC-UK	01008	€1.6m	Health services in Tanchon, Sinhung etc
	UNICEF	01010	Approx. 85% of €2.6m	(project component) supply of 6 months of essential medicines in 2,955 health facilities
2006	PU/Unit 1	01001	€0.59m	IV fluids
	IFRC (DK)	01005	€1.5m	Supply of essential medicines to 2,234 facilities
	UNICEF	01008	€1.5m	Supply of essential medicines to 2,917 facilities
	HI/Unit 7	01009	€0.47m	Support to disabled
Total			€2.75m	

B.2.2.1. Support to Local Health Care Facilities

Background

72. The national health system functions along the principles of primary health care (PHC), at five different levels.

- Prevention and community PHC at the household level are carried out by volunteers trained at promoting healthy behaviour, and by “section doctors,” general medical practitioners based at rural (Ri) or urban (Dong) clinics. Each section doctors is in charge of approximately 130 families; they usually receive outpatients in the morning at the clinics, and perform home visits in the afternoon. In the absence of private practice, this system ensures a good PHC coverage (medical files, vaccinations).

- In addition to urban and rural clinics, which can be found every 10Km on the average due to bad roads and lack of transportation, Ri hospitals with a maximum of 10 beds and the capacity to perform minor surgical procedures, exist in some remote villages.
 - County or district hospitals are the first referral structures. They provide surgical as well as medical services, but transportation can be a problem.
 - Provincial hospitals (general²⁶, maternity and paediatric) are the second referral level.
 - The specialist national hospitals in Pyongyang constitute the third level of referral.
73. The number of health care institutions and professionals meets internationally recommended standards, though with an inverse doctor/nurse ratio of 2.9/1.²⁷ The geographical distribution of structures is adequate. In accordance with the national health policy, health care is free of charge.
74. Insufficient maintenance and rehabilitation of structures and equipment, chronic shortage of essential renewable supplies (see below) and outdated medical knowledge and practice, have placed severe constraints on the system's performance. Some specialist medicine, if not available at the health facility can be bought in shops and pharmacies in the capital and in major provincial cities. The range and quantity of pharmaceutical products available in the DPRK is limited. Traditional (Koryo) medicine uses physical (massage, acupuncture etc) and herbal treatments. Current practice in the DPRK applies Koryo medicine in conjunction with western diagnostic and therapeutic methods.

Koryo medicine

According to the definition proposed by the World Health Organization (WHO), traditional medicine “includes diverse health practices, approaches, knowledge and beliefs incorporating plant, animal and/or mineral-based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to maintain well-being, as well as to treat, diagnose or prevent illness.” The term “Koryo medicine” describes the type of traditional medicine practised in the DPR Korea, which is based on the same principles as traditional Chinese medicine.

75. UN agencies and international organizations have followed different and complementary approaches to reinforce the capacity of the healthcare system. UNICEF and the International Federation of the Red Cross and Crescent (IFRC) mainly targeted the first level of care, with intensive support to the clinics and to a varying extent, the district and county hospitals. More than 5,000 PHC facilities have been consistently supported (see §85).
76. The national warehousing system for health products is managed by the Ministry of Public Health (MoPH). This pyramidal structure starts at the Central Medical Warehouse in Pyongyang, passing down to city or provincial medical warehouses, and onwards to county or district warehouses. The same system now applies to the cold chain for vaccines. In June 2007, following a recommendation by the Global Alliance on Vaccines

²⁶ General provincial hospitals are divided into two main departments: surgery and internal medicine.

²⁷ Joint MoPH-WHO assessment of county hospital project “improving access to quality essential health services at community level in the DPRK”, April-May 2006

and Immunization (GAVI), the MoPH centralised warehousing system took over the storage and handling of vaccines which had previously been carried out by Hygiene and Anti-Epidemic stations, responsible for control and communicable diseases²⁸. Distribution of corresponding syringes was already managed by the medical warehouses.

77. Support to provincial maternity and paediatric hospitals was part of UNICEF's remit until 2005. Since 2006, WHO has provided provincial hospitals with renewable supplies. Selected county hospitals were rehabilitated, 17 of which received DG ECHO funding to improve the surgical department.

Relevance

78. According to a high-ranking official of MoPH²⁹, DPRK is highly and increasingly dependent on imported pharmaceuticals, being only able to produce some 30-40% of its needs (against 70% of local production in the 1980s). Despite recurrent over-use of certain drugs (injectables, broad spectrum oral antibiotics and IV fluids) and probably some hidden stocks in the better-managed healthcare facilities, there appeared to be a consistent and preoccupying chronic shortage of e.g. essential renewable supplies. In that perspective, the relevance of these essential inputs was confirmed by health workers as well as operational partners.
79. While the relevance of vaccines as an input is obvious, UNICEF's decision to apply for emergency humanitarian funding, in the context of its ongoing support to a routine national vaccination programme, would question the accuracy of the agency's internal planning and budgeting methods.
80. Support to local health care facilities consisted in the rehabilitation of structures, provision of drugs and medical supplies and transfer of knowledge. Capacity building was mentioned as a high priority by several interlocutors. The most important structural elements added in clinics were improved insulation through the installation of new doors and windows, adduction of water, construction of bathrooms and incinerators (the latter by SC/Unit 2 only). The stated aim was to increase the utilization of delivery rooms by making them more comfortable.
81. The relevance of these improvements on safe delivery at the clinic is nevertheless marginal when compared to standard interventions for the prevention and management of hypertension, bleeding, infection and prolonged labour. The ongoing renovation of operation theatres and delivery rooms (by WHO, with ROK funding) in county hospitals was necessary and overdue, since many hospitals were built 40 to 50 years ago.
82. Interviews with hospitals and clinic directors confirmed that acute respiratory infections (ARI) in winter, and diarrhoea in summer, are the most frequent health problems for those

²⁸ The GAVI recommendation to transfer the cold chain to the warehouses did not completely solve the problem. Personnel from the anti-epidemic stations, who have received a lot of training over the years, were not transferred, leaving the cold chain in the hands of warehouse managers.

²⁹ Dr Jong Bong Ju, Deputy Director of External Affairs, Ministry of Public Health

who are less than 50 years old. For older people, the main diseases are said to be related to high blood pressure. At the An San Dong polyclinic in Pyongyang for example, out of 40 deaths reported in 2007, reportedly none was related to acute infections.

83. To the exception of floods and other disasters, indications of a large scale of acute and urgent health needs, requiring *emergency* humanitarian interventions, were lacking. However, it was also noted that the assistance provided to make pregnancy safer was insufficient and of low effectiveness.
84. Sustainable solutions for the health sector would require in-depth reform of the MoPH (and contiguous line Ministries) and the definition of a reform strategy, activities for which the mandate of WHO designates the agency to assume a leading role.

Coverage

85. All the accessible local health care facilities at the first level of care were targeted for the distribution of essential medicine with DG ECHO funding during the period 2004-2007. Basic renewable medical supplies and micro-nutrients were handed over by UNICEF to the Central Medical Warehouse for distribution to 2,917 facilities in the cities of Pyongyang and Nampo, and five provinces: North and South Hwangae, North Hamgyong, Ryanggang and Kangwon. In association with the National Red Cross Society (DPRKRC), the IFRC took responsibility for distributing kits to 2,234 PHC facilities in the provinces of South and North Pyongan, Chagang and South Hamgyong, as well as in the city of Kaesong (see map in Annex B).
86. Because access for monitoring was denied, distribution of essential medicine to Chagang was suspended in December 2006, and to the provinces of North Hamgyong and Ryanggang in early 2007. A number of counties in North Pyongan, Kangwon and South Hamgyong were also declared "off limits".
87. Within that framework (which does not concern e.g. vaccinations), the supply of basic medical kits to every reachable basic primary healthcare facilities (Ri –rural- and Dong –urban- clinics and hospitals) as well as to the first referral structures (county and district hospitals) has ensured optimum coverage. As there are no private alternatives and health care is free for all, the national health system aims at providing equitable access to basic health care services for the entire population.
88. Despite the departure of OCHA with the suspension of humanitarian aid, coordination –a pre-requisite to effective coverage- was reported to be functional. An overall matrix for "Support to Health and Nutrition Services" is regularly updated. This chart records the activities in every accessible county, between IFRC, UNFPA, UNICEF, WFP, WHO, and the concerned EUPS Units (1, 2 and 3). National authorities were also said to ensure that no duplications took place, although their own internal lack of coordination is not always helpful.

89. Vaccination of pregnant women against tetanus, and the Expanded Programme of Immunization (EPI) in children aims to cover the entire country (10 provinces and 2 cities), with an estimated target population of *at least* 321,000 children below one year of age and their mothers.³⁰ Over a 2-year period, DG ECHO provided funding to buy vaccines for 9 months routine immunization of pregnant women and children. The national EPI programme is dependent on external support for vaccines, disposable injection devices and cold chain technology. The Global Alliance on Vaccines and Immunization (GAVI) has given financial and technical support to the programme since 2002.

Efficiency

The efficiency of the partners has been significantly affected by the various constraints (see chap..) incurred in the highly specific operating context of DPRK, although at various degrees.

90. Some national *counterparts* appeared to have been easier to engage than others. Like most authorities in DPRK, the MoPH –with whom international assistance has been working for many years- remains largely a question mark, even to the most experienced implementing partners. The structure, organigram, resources, policy, budget, and even the exact physical location of the Ministry are uncertain. Moreover, as the main counterpart of EUPS partners and international organisations working in the health sector (except HI and IFRC) is the Ministry of Foreign Affairs (MFA) through either KECCA or NCC (National Coordination Committee), it is actually often the MFA who appears to be the main decision-maker for external cooperation in the health sector. Such a framework is bound to make effective cooperation rather difficult. In supplying local healthcare facilities, the IFRC could rely on the extensive network of DPRKRC which, although somewhat obscure as well in its structure, was both professional and committed.
91. Strengthening the national health system is thought to be an efficient way of supporting PHC services.³¹ The decision to support the vast existing network of first line health care structures implied that UNICEF and the IFRC were prepared to *monitor* the regularity and adequacy of supplies. In respecting the specific functions of the different levels of care and referrals, the IFRC approach seems to have been the most coherent and therefore potentially the most efficient for medical kits distribution. In the field of monitoring, despite recent restrictions which have limited the numbers of its monitors to six "own" national (i.e. those not working for DPRKRC) and two international staff, the IFRC has managed to visit once a year up to 70% of all supplied facilities, against a stated rate of 10-15% for UNICEF.
92. Although no consistent pattern of findings could unfortunately be defined to fully compare UNICEF distribution scheme with IFRC's, the level of access usually granted in facilities supplied and monitored by IFRC tended to demonstrate that more regular visits

³⁰ Countdown to 2015, The 2008 report, Tracking progress in maternal, newborn and child survival, www.who.int accessed 18 April 2008

³¹ Guidelines for humanitarian assistance in the health sector, SEKA 522/01 Peter Lundberg, SIDA 2001

would usually enhance confidence and openness, whilst the opposite could produce reverse effects.

93. It should be reminded that any monitoring visits could only be performed after the usual pre-advice of one week minimum, which *de facto* limits their relevance. Furthermore, one monitoring visit a year or less is hardly sufficient to modify behaviours, e.g. regarding the often dramatically poor stock management in many clinics and hospitals' pharmacies, where drugs with expiry dates in the early 1990s could regularly be seen. In a country deprived of nearly every commodity, people would naturally tend to refrain from throwing anything away – including pharmaceuticals. In Hoichang, products which had expired in 1996 were said to be still displayed for “decoration” (sic) purposes. In Sariwon, the validity of an antibiotic still displayed among others in the pharmacy of the paediatric provincial hospital had expired since 1993.
94. In 2006, after the government's decision to stop humanitarian aid, negotiations³² led to a new common list of 24 essential items. Apart from salbutamol for the treatment of asthma, no medicine was included for chronic diseases. UNICEF decided to supply the same items to clinics and referral hospitals, leaving the logistics of in-country storage and distribution to MoPH. The IFRC opted for a supplementary kit to referral hospitals, containing 10 renewable items in addition to the basic kit for clinics.
95. With the assistance of DPRKRC, the IFRC has also been able to bypass the provincial level in the cumbersome MoPH warehousing system, and to supply directly the lower Ri levels with their own transportation means. IFRC deliveries were made quarterly in well packed and marked cardboard boxes, which enhanced visibility and facilitated monitoring. UNICEF's items were delivered together with MoPH supplies. This explains that in some cases (Moranbong district hospital in Pyongyang), the director did not seem to know that supplies had actually been provided by UNICEF and funded by DG ECHO, and thought that it all came from MoPH.
96. IFRC has also set up an effective system of recording books, which could be readily found in the pharmacy of every supplied facility. These books record entries, consumptions by type of medicine, and monthly balances. They have helped to document weaknesses in prescribing practice, which can be addressed through training courses. A joint (inter-agency and MoPH) initiative is the new “section doctors manual”, which should be published in 3-4 months as a result.
97. UNICEF has played an important role in developing an integrated system of vaccines storage and distribution, as well as vaccination campaigns. The cold room storage at the Central Medical Warehouse has been rehabilitated to international standards. A measles outbreak in 2007 resulted in a national measles vaccination campaign covering the entire population aged 6 months to 45 years, with support from UNICEF and WHO.

³² UNICEF in particular repeatedly emphasised the strenuous negotiations with the authorities on that issue. However, according to a former Technical Assistant, the decision to have a standard kit was not only due to the government, but largely reflected the ECHO pre-condition to have a standard kit between IFRC and UNICEF at primary health care.

Unfortunately, at the time of the evaluation visit there was *no* measles vaccine stored at the Central Medical Warehouse. Good practice demands that a buffer stock is kept at all times.

98. At the lower level of the cold chain, shortcomings could regularly be seen. Small quantities of BCG, hepatitis B, polio and tetanus vaccines, in dubious conditions ("it is only there for one week"), were found in inappropriate upright refrigerators in the pharmacies of county hospitals ("this is the only fridge we have"). The storage conditions at these hospitals were inadequate for vaccines: no temperature sheets were displayed and no thermometers seen. The same refrigerators were also used to store a variety of other products.

Effectiveness

99. The government decision of November 2005 to stop humanitarian aid has severely disrupted the effectiveness of those projects that were not already oriented towards development (HI and PU were less affected). Despite the above, the principal objective described in the consecutive DG ECHO Decisions ("to improve health conditions among the most vulnerable groups in the DPR Korea") has been broadly achieved, partly due to the fact that it was suitably general and non-attributable. Project components aimed at making pregnancy safer lacked the necessary coherence to achieve a high level of effectiveness (see also chapter 2.5.2).
100. Specific objectives were generally reached (medical kits and vaccines provided, IV fluid units functional, orthopaedic workshop reinforced, water supply projects consolidated and hygiene promotion supported), to the notable exception of components which aimed at enhancing sustainability (see below).
101. Humanitarian assistance has allowed the survival and recovery of the national health system for more than a decade after the near-collapse of the country in the mid-nineties. Vaccination coverage rates have rapidly increased to reach pre-crisis levels. The effectiveness of vertical programmes in the control of malaria and tuberculosis demonstrates that the system is working in a coordinated manner, and confirms the existence of functioning communication channels in the Ministry of Health. Although medicine shortages occur, first line health workers have the capacity to diagnose and treat the most common causes of morbidity in childhood, diarrhoea and acute respiratory infections. The timely detection and effective management of obstetric emergencies at clinics and county hospitals need to be further improved.
102. Essential drugs and medical supplies provided through IFRC and UNICEF were said, in nearly all clinics or hospitals visited, to cover between 60% and 80% of the urgent needs, the balance being generally divided between government supplies (some antibiotics) and traditional 'Koryo' medicine (for prevention and chronic diseases, not emergencies). However, some of the most remotely located rural clinics were also found to be probably the most vulnerable to a disruption in the supply of the basic medical

kits. One clinic some 25Km from Kaesong seemed to be at the very end of the government's supply line; very few other drugs were on display.

103. Notwithstanding supplementary referral kits supplied by IFRC, the standardised models of medical kits imposed to IFRC and UNICEF, also appear to be unbalanced. Small clinics (where only minor surgery would be performed from time to time) would e.g. be supplied with as much surgical material as larger hospitals. In Hoichang for example, surgical consumables delivered to a polyclinic had been left in their box (the doctor was still using the additional supplies received during the floods of July 2007), whilst the surgeon of the county hospital next door (the hospital was actually located in the same building as the clinic) was in dire need of these very items.
104. To assess the cost-effectiveness of the various health-related projects, a comparison could possibly be made between the costs of different projects with comparable outcomes, such as the distribution of essential medicine, the refurbishment of operation theatres, or the training of volunteers in health promotion. Under the 2006 Decision for example, IFRC was tasked to supply some 2,234 healthcare facilities for a total budget of €1.5m, whilst UNICEF was given the same budget to cover no less than 2,917 facilities. Such figures would however have little or no meaning, as they would not consider factors such as the possible use of own funds, the historical background for the selection of the respective distribution areas, their population densities and the corresponding numbers of facilities, different monitoring and delivery systems, or transportation problems. For other projects, comparison of actual costs would have to be made against a desirable level of expenditure for the obtained results. In the absence of such detailed cost-analyses, it can only be said that operational partners working with non-governmental local counterparts obtained higher levels of accountability.

Outcomes and Impact

105. Again with regard to the principal health objective of consecutive DG ECHO Decisions, the projects have probably contributed to a positive outcome for vulnerable groups; definite attribution is not realistic in the DPRK context. Available data from anthropometric surveys have e.g. confirmed reported trends in improved children's growth, an indicator of health and well-being (see chapter B.2.4 on Nutrition). Data on maternal mortality ratios (MMR) are hard to evaluate over a short time period. International records based on government information quoted 110 maternal deaths for 100,000 live births in 1995. Findings suggesting a decrease in maternal mortality were obtained from more recent surveys in provinces receiving UNFPA assistance. According to modelled estimates, actual maternal mortality could however be more than 3 times higher than the reported figure.³³
106. Positive impacts were regularly reported by recipients, although almost always by using anecdotal or unsupported statements ("there has been a 'significant' or 'sharp' decrease

³³ Countdown to 2015, The 2008 report, Tracking progress in maternal, newborn and child survival, www.who.int

in the number of diseases"). When figures could be found at the local level, their accuracy is generally doubtful and their attribution to the concerned project can sometimes be problematic.

107. Impacts were often mentioned e.g. in the decrease in duration of illness for diarrhoea and ARI, the most frequent reasons for hospitalisation of children. These diseases occur more frequently in unhygienic and overcrowded environments, factors that are insufficiently addressed. Recurrent lacks of hygiene are mentioned in chapter B.2.3. Some detrimental established behaviours and policies have also gone unreformed. ARI may have decreased in rehabilitated primary schools due to better insulation of windows, but according to government policy, classrooms are not longer heated in springtime (i.e. after 21st March), even if outside temperatures are still below 0°C. Hospitals were also generally found to be freezing places –to the exception of rehabilitated delivery rooms and operation theatres- as coal or fuel tend to be reserved for strategic industries.
108. It should be noted that assistance to the different levels of the health care system should be balanced in order to achieve maximum impact on health outcomes. Missing links in a chain of essential inputs would negatively affect the effectiveness of interventions, reducing the total impact of aid. When resources are insufficient to cover all the needs,³⁴ choices have to be made. In DPRK, the inclusion of more than 5,000 first line health structures meant that service support had also to be targeted. This has resulted in an assistance package corresponding only to the most urgent priorities.
109. In general, rehabilitations of hospitals have an impact on the survival of surgical patients, only when the numbers of procedures can be increased, and/or the quality of care can be enhanced. This is still far from being the case in DPRK. For example, in the hospitals visited, the sterilization department appeared to be a restricting factor to the capacity for safely increasing the work volume. An unstable supply of electricity and shortage of soap and disinfectants jeopardize the use of appropriate methods for cleaning, thoroughly disinfecting and sterilizing surgical equipment and instruments. Hot air sterilization is a suitable method for heat-resistant glass and metal instruments, if the apparatus has good electrical heating and a precisely functioning thermometer. It should not be used to sterilize re-usable needles and syringes, or synthetic tubing, as was observed in some of the hospitals visited. Steam autoclaves were installed as part of hospital rehabilitation, and pressure cookers have been donated to a limited number of clinics (e.g. as part of flood relief). Sterile packs of instruments and gowns, ready for immediate use, were not visible in any of the surgical departments of hospitals visited. Post-operative care was difficult to assess, since the team had limited access to hospital wards. A shortage of bed linen was noticed. Data on post-operative complications and surgery-related mortality were not made available.

Sustainability

³⁴ In its April 2002 report presented at the 55th World Health Assembly, the “WHO Commission on Macroeconomics and Health” estimated the minimum annual spending required to provide essential health care interventions to a population at 30 USD per inhabitant

110. Without external support, the current health system in DPRK is bound to rapidly deteriorate. Except for oral re-hydration sachets (ORS), the local production of medicine, vaccines and renewable supplies falls far short of consumption. Apart from ORS, none of the locally produced medical items are at the level of internationally recommended standards³⁵. Although health structures are adequate in numbers, many buildings need further rehabilitation. Curricula for training of health workers need urgent revision and updating to reflect and consolidate changes in international medical practice. Even under the best of circumstances, linking Relief to Rehabilitation and Development (LRRD) is usually a gradual process.
111. While success in the short run mainly depends on the continuing availability of external assistance to import necessary inputs, long-term development will demand a commitment to make investment in health care services a national priority.
112. Continued supplies of essential medicines to healthcare facilities may in particular be problematic. Both IFRC and UNICEF admit funding gaps for the coming year. The IFRC can currently rely on donations from a number of European Red Cross National Societies (Sweden, Germany, Denmark) which amount to roughly half of the needs only. The ROK National society should also be providing funds as from 2009, but even that contribution would probably still leave a gap. UNICEF's overall planning calls for 33 million US\$ over their 3-years programming cycle between 2007 and 2009. This objective is likely to be hard to meet, in the face of limited funding and higher-than-expected expenditures: 18 million US\$ have already been spent in 2007 (floods, measles) and 15 million more are already budgeted for 2008³⁶.

Conclusions and Recommendations

113. The transition from countrywide drug distribution to a comprehensive PHC programme is far from complete. Pharmacy management within health structures was found to be chaotic, though clinics supported by the IFRC kept a register of weekly consumption by item. Spot-checks of these registers confirmed a high consumption of injectable drugs and of broad spectrum oral antibiotics when available, with shortages occurring several weeks before the next distribution. The project has allowed effective management of

³⁵ After the end of the field visits, IFRC has reportedly launched 3 pilot procurement tenders to purchase locally some paracetamol, aspirin, etc. As the attempt has apparently been successful, IFRC was considering to increase these purchases by two other items.

³⁶ DG ECHO provided up to 20-30% of UNICEF funds in DPRK. UNICEF may be getting US\$3 million from ROK in 2007 (against US\$20 million for WHO). Other funds may come from SIDA, AusAid, the German UNICEF committee. UNICEF has also access to CERF (the UN Central Emergency Response Fund): 3 millions were handed over for measles vaccination, and US\$600,000 for floods response (against an appeal for 4.2 million). In that framework there is also a budget line for "under-funded emergencies", which has provided US\$5 million to UN agencies in 2007, including 1.7 million for UNICEF.

communicable diseases at the clinic, the first level of professional care. Conditions for safe delivery have remained insufficient. The new handbook for section doctors is still in preparation. In the areas supplied by UNICEF, the range of medicine distributed to county and district hospitals is too narrow for their role as referral structures.

114. The approach of operational partners working with national counterparts outside ministerial structures, e.g. the IFRC and HI/ Unit 7 (see below), appears to be the most integrated. The collaboration with committed national organizations such as the National Red Cross Society, offers some assurance of continuity. Short term project sustainability is however determined by the degree of dependency on products from abroad. In the absence of a fundamental change in international relations, external donors will still be needed to fund imports. All health-related projects (except perhaps the school for the deaf and mute – see §212) are therefore unsustainable to some extent, and medicine distribution in particular. An interruption in the supply of basic emergency drugs would cause a further reduction in the quality of health care, which is already low, compared to international standards.

Recommendations

Considering the precarious ties with the ROK, its major humanitarian donor, the continuation of existing projects with alternative funding is not fully assured. Resident organizations need to be alert to signs of a gradual decline in the health care system. At a minimum level of further engagement, it would be recommended to DG ECHO to maintain the capacity for quick response in case of emergencies.

Regarding possible LRRD, a cost-effectiveness analysis to guide further investments in medicine and supplies would be commendable. If the results of pilot projects cannot be analysed, it would be advisable to follow international guidelines, especially with regard to maternal health services.

B.2.2.2. IV-Fluid Production

Intra-venous (IV) fluids

Intra-venous fluids of different composition have specific indications. The most commonly used solutions are 5% glucose, 0.9% sodium chloride and Ringers Lactate, which contains potassium and calcium in physiological amounts, in addition to sodium chloride. Glucose solutions contain no electrolytes and are used as a vehicle for IV administration of certain drugs, to replace water loss in febrile illness or in acute renal failure. Sodium chloride (normal saline) and Ringers Lactate are suitable for fluid replacement in the initial treatment of hemorrhagic shock or gastro-enteritis with severe dehydration. A standard post-operative fluid regime would be 2 litres of 5% dextrose and 1litre of normal saline over 24 hours, with added potassium post-operatively. (Reference: Oxford Handbook of Clinical Medicine, 3rd edition)

Relevance

115. The project was proposed in 2002 by the MoPH, based on the objective to enhance the local production of quality IV fluids, by following a decentralised approach. The project was accepted by Première Urgence (PU) as a possible 'entry point' to other programmes in DPRK. It was reported that a list of 100 potential production locations had been provided by MoPH; out of these, twelve hospitals were selected by PU. The choice was validated by the Ministry. Maternity and paediatric hospitals had been rejected from the original list, because already covered by UNICEF and SC-UK, and “not sufficiently competent”. After the government's decision of 2005 to stop humanitarian assistance, PU became the Unit 1 of EUPS; as the production of IV fluid was already a development-oriented activity, the project was not severely disrupted.
116. The production of quality IV fluids is much needed in DPRK, but could also be seen as a wider development and policy issue rather than an emergency humanitarian one. IV fluids are most often used to treat dehydration in patients with diarrhoea (which is consistent with the objective of fighting against water borne diseases), and for major surgical operations. Locally produced IV fluids (other than the production supported by the project) are readily available but generally of dubious quality and stored in non sterile conditions. There is a tendency to over-use all injectable medicine, including IV fluids, in DPRK. The average consumption per patient is indeed high because of typically protracted treatment schedules (3-4 days of IV fluids for severe diarrhoea, 5-7 days after surgery).
117. Another question pertaining to relevance, relates to the national policy regarding production and distribution, as the vertically segmented DPRK society tends to shy away from coordination and horizontal cooperation at almost every level.

Coverage

118. Coverage appears to be rather poor. In all six hospitals visited, the production was at most times barely sufficient to cover the hospital's own needs. Production is generally used immediately, either if one batch is produced per day (160 PVC bags) or two (320 bags). A small stock of approx. 50 reserve bags was found in Anju only. The output is

used exclusively in the hospital of production (generally the provincial or municipal general hospital) and are not distributed to neighbouring health facilities, even when these are the maternity and paediatric provincial hospitals, where they could be used for treatment of acutely ill children or women in labour. Dissemination to more remote facilities located in neighbouring counties would entail problems of transit authorisations and transportation costs. In all of the visited hospitals, less secure 'beer' glass bottles were also used in parallel. These bottles are sterilised in the project's new autoclaves, but their plugs (in rubber or sometimes waxed paper tied with a knotted string!) cannot guarantee the necessary sterile conditions.

119. An exception was made during the 2007 summer floods where pockets were sent (probably following MoPH instructions) to some needy places, but then generally under the close supervision of staff from the production hospital. Patients have generally to come to the production hospital in order to benefit from quality IV fluids.
120. Small quantities of imported IV fluids are also included in the WHO supplies given to provincial paediatric and maternity hospitals. County hospitals are given IV fluids only if they are receiving drug supplies through the IFRC. The inter-agency emergency basic kits that were distributed after the floods also contained a limited quantity of IV fluids.

Efficiency

121. The project was efficiently carried out, and every visited location was quite functional. It is however arguably a typical example of imported high-technology, of which local authorities seem to be overly fond –despite their stated policy to rely on local resources. The most important parts (autoclaves etc from France) are subject to 15 years warranty, and have been provided with a reasonable number of spare parts (2 years on average), the storage of which is centrally –and apparently quite well- managed. Quality control is also centralised and should be sustainable. Concern exist however regarding the continued procurement of PVC bags and infusion sets from China by MoPH.
122. The ubiquitous electricity cuts are generally not a problem if they are short (+/- 2 hours), as the “intelligent” autoclaves supplied by the project can take the interruption into account to assess what needs to be done to mitigate the effects, and restart the process. If the power cut is longer however (e.g. 10 hours), the entire batch of PVC bags may be lost.

Effectiveness

123. Although the quality of IV fluids produced by the project has been highly appreciated, the limited quantities have a detrimental result on effectiveness. As already stated, a key problem with IV fluid, as for other injectable medical products of which Koreans seem quite fond *vs* e.g. pills, is their protracted period of use. IV fluid administration should be discontinued as soon as possible when the patient is capable to drink. Any IV fluid system can produce only a maximum of 2 cycles (160 bags each), perhaps 3 cycles a day, before the temperature of the autoclave becomes too hot for PVC.

124. A contiguous problem, not sufficiently tackled by the project, was found in the disposal of used bags –and most importantly of used, contaminated needles. A variety of replies –and sometimes no replies- were given to this apparently unexpected question. In Hoichang county hospital, empty bags were first said to be “recycled into daily necessities”, before coming to the more politically correct reply of being “returned to the county’s procurement station”. In Nampo, the first reply was that “used products are thrown away”, and then that “PVC bags are sent to the industrial sector for appropriate re-utilisation”. Needles were generally reported to be buried –although details were sometimes unclear - or incinerated in metal drums.

Outcomes and Impact

125. Impact of safe IV fluid production is difficult to assess. Some hospitals stated that before the project there had been “a few” deaths from acute diarrhoea (Anju). They were also able to increase the number of surgical operations from “3 or 4 per day” to “5 or 7”. As before, half of the operations are programmed ones, not emergencies. In Nampo hospital, the overall number of deaths (no cause stated) had been reduced from “5 to 6 per year before” to “2 – 3 now”. Treatment of diarrhoea is also “shorter” and “less painful”. A rough calculation of the total annual IV fluid production and required average consumption per patient would lead to an estimate of around 50,000 potential beneficiaries.

Sustainability

126. The sustainability of the decentralised IV fluid production depends essentially from the continued supply of raw materials (PVC bags for IV fluids -but also for blood transfusion-, needles etc) from China, which according to MoPH cannot be guaranteed. In three cases (Haeju, Wonsan, Kumya), responsible staff of hospitals expressed concern about possible lack of sustainability prospects of the current decentralised system. They stated that raw materials may be lacking in the future as well as spare parts, and when asked to choose, said they would be in favour of a centralised system by MoPH. Should there be any shortage of PVC bags, hospital directors generally replied that they would revert to the previous situation and use bottles again.
127. The project should be taken over by WHO, which has obtained a 5-years budget from ROK to buy raw materials, glucose, PVC bags etc. WHO seems to favour a more centralised production for the future –an option also supported e.g. by UNICEF- provided that transport means and fuel are available.

B.2.2.3. Orthopaedic Workshops

Relevance

128. The level of relevance of the orthopaedic workshop in Hamhung is high. The workshop was created in 1951 during the Korean war and has long remained the only production line of prostheses in DPRK. It was meant to complement the nearby national orthopaedic hospital, the only one of its kind in the country. However, until the modern techniques gradually introduced by Handicap International/ Belgium (HI) and its local partner KFPD (the Korean Federation for the Protection of the Disabled) –now the Unit 7 of EUPS-, the workshop had only been supplying mass products made of wood, leather and metal. This production line is still operating in parallel to the new one. HI's support to KFPD has contributed to the integration of the disabled, another important objective (see below and under Cross-cutting issues). Such activities are also entirely relevant to HI's mandate and build upon the experience acquired in conflicts and humanitarian situations throughout the world.
129. It should be noted that Hamhung is a strategic town, being one of the largest military bases and industrial centres in the country. This may have played a role in the fact that Unit 7 was authorised to operate in such a normally restricted environment; although many patients are victims of road traffic accidents, soldiers and mine workers may also benefit from the facilities.

Coverage

130. The number of disabled people in DPRK is still a question mark: a 1998 study mentioned that only 3,5% of the total population were suffering from various types of disability, whilst e.g. in China the rate is 6,5%. The same study stated that there are 160,000 amputees. 14,000 of these have so far been assisted by the project (see §136).
131. There are now three orthopaedic workshops in DPRK: Hamhung (East coast), another one (supported by ICRC since 2003) in Songnim -closer to Pyongyang, which covers the centre and south of the country, and a more recent facility in Pyongyang itself, although for army use only.

Efficiency

132. Unit 7 is the only EUPS which does not have KECCA/MFA as main counterpart but the highly committed KFPD, with exceptionally successful results. The first contacts between HI and its counterpart (which at the time was still called the Korean Association for Supporting the Disabled – KASD) took place in 1998. After in-depth assessments, cooperation began in 2001, and joint activities in Hamhung started in 2004. Since 2001, HI has been consistently supporting the Federation with funding channels and capacity building.

Effectiveness

133. The objectives described for the 2006 Decision have been reached, i.e.
- People with physical disabilities are more mobile and/or independent through the production and provision of orthopaedic devices, physiotherapy treatments, wheelchairs etc.
 - Patients receive improved medical care at the Hamhung Orthopaedic Hospital.
 - Improved ability of the KFPD to serve disabled persons.
134. Although the production of traditional leather and wood prostheses still continues in parallel with the new polypropylene ones in Hamhung, authorities have acknowledged the benefits of the integrated concept of the much lighter and individually fitted prostheses (which require not only imported raw materials and specialised technical skills for production, but also an upgraded surgical approach for amputations) and upgraded re-education. An objective of the current discussions with Unit 7 is to merge both production lines. In the meantime, the beneficiaries of traditional prostheses can also use the modern revalidation facilities. A contiguous issue is the extended period of time needed for revalidation. The nearby dormitory has been rehabilitated, but patients still have to pay for their own meals, and would therefore tend to leave as soon as possible.
135. Operating theatres at the Hamhung national orthopaedic hospital have also been rehabilitated by Unit 7, although HI was not specialised in such activities³⁷. Much remains to be done, though. Despite its reputation in the country, the orthopaedic hospital is lacking i.a. anaesthetics for surgical operations (anaesthetic gases are said to be reserved for children and the most serious cases), modern X-ray facilities, but also basic plaster or IV fluids, despite the production unit set up by Unit 1 at the nearby provincial hospital.

Outcomes and Impact

136. A 1998 study estimated the number of amputees at 160,000. Fourteen thousand of these have so far been assisted by the project (prostheses, crutches, wheelchairs etc); 800 new beneficiaries are fitted annually with prosthetic devices. The nearby national orthopaedic hospital facilities have been extended to accommodate adapted surgery and prevention work, trying to avoid amputations. Medical training is provided in cooperation with IFRC. There are also several indirect impacts, such as the trained production workers, who seem quite proud of their status, or the almost complete access to the Hamhung factory granted to the international staff of Unit 7, even to the parts which are not involved in the project.

³⁷ HI has requested the assistance of Unit 1/PU which is specialised in hospital rehabilitation, but authorities refused this cooperation, as Unit 1 is supposed to be providing IV fluid exclusively. This is only one example of the very detrimental vertical segmentation, which prevails in DPRK.

Sustainability

137. Despite its obvious success, the orthopaedic workshop of Hamhung is not yet sustainable, as e.g. all the raw plastic materials have to be imported from Europe, together with most machinery spare parts. Prostheses are expensive and must be changed every 3 years on the average. The search for funding to cover the next budget is still ongoing. In the short term, Unit 7 should be able to obtain additional funds from the Belgian and Swedish cooperation agencies³⁸.

³⁸ KFPD started to receive funds directly from ROK too.

B.2.2.4. Blood Transfusion Centres

138. The WHO project to support Blood Transfusion Centres had started before the period covered by this evaluation: the first contacts took place as early as 1998, and the project started in 2003. There seems to have been some definite improvements. WHO rehabilitated the National and five Provincial Blood Transfusion Centres. ECHO funds were used for rehabilitation of the Centres in Pyongyang, Sariwon (both were visited), and Hamhung.
139. The director of the Pyongyang Centre reported that the main indications for transfusion were major surgery and accidents. At least 70% of donors are female. A large proportion of the women donating blood at the time when the team visited the centres were of child-bearing age. Because the potentially life-saving effect of blood transfusion has to be weighed against a multitude of risks, the project demands a high level of skills and professional surveillance.
140. Outcomes and impact of the project include i.a. the following:
 - The daily numbers of donors have reportedly doubled in Pyongyang (from an average of 60 before the project to 100-120 today) and in Sariwon (from 15-20 to 25-30 donors), in much greater security and comfort.
 - All the hospitals in Pyongyang are now provided with safe blood at the level of 80-85% of their surgical and accidental needs. In Sariwon, 100% of the city needs are covered, and 60% of the province's. In remote counties, blood for emergency transfusion is obtained from registered donors.
 - Blood is provided in safe PVC plastic bags, and maintained by a rehabilitated cold chain system.
 - There is an overall quality control, including at provincial level.
 - A blood study centre has been set up at the national level, good practices and information are disseminated to the provincial centres, and workshops abroad can be attended.
141. Safe transfusion requires however continuous availability of reagents for screening of donors and cross-matching, as well as sterile needles and tubing. The project relies on financing from ROK for its continuation (further renovation of other provincial centres, consumables) but sustainability is still a problem. There are no spare parts at all for the equipment (from China, UK, Germany). When supplies are scarce, the centres utilize locally produced anti-sera and re-usable needles. A shortage of human plasma has been addressed by the production and use of ox-plasma, an initiative which would require additional assessment. In Sariwon, contaminated materials were reportedly buried after chemical disinfection, an unsatisfactory practice.

B.2.3. Water, Sanitation and Hygiene Promotion

Summary table 3

Year	Partner	Contract n°	Amount (budget)	Activities
2004	Triangle	04001	€0.5m	Water supply and sanitation in Munchon
	CESVI	04002	€0.45m	Water supply and sanitation in Anbyon
	Concern	04003	€0.45m	Water supply and sanitation in Hoichang, Dokchon
	IFRC (NL)	04004	€1.44m	Water supply and sanitation in 30 communities, N. and S. Pyongan provinces
	GAA	04005	€0.71m	Water supply and sanitation in Kujang
	UNICEF	04007	Approx. 50% of €2.15m	(Project component) water supply and sanitation in Yonsan, Rinsan and Unryul counties
2005	N.A.	N.A.	N.A.	
2006	Triangle/Unit 5	01003	€0.31m	Water supply and sanitation in Munchon
	GAA/Unit 4	01004	€0.5m	Water supply and sanitation in Anbyon
	GAA/Unit 4	01006	€0.5m	Water supply and sanitation in Kujang
	SC-UK/Unit 2	01007	€1.61m	Water supply and sanitation in Tanchon, Sinhung
	Concern/Unit 3	01010	€0.71m	Water supply and sanitation in Hoichang
Total			€8.26m	

Background

142. In most urban areas of DPRK, water supply systems were built in the 1970s, in a context of rapid industrial development. The infrastructure typically consisted of pumping stations fed from rivers or boreholes, some water tanks, a network of cast iron pipes, and rather primitive sewage tanks for collective buildings or open drains leading back to the nearest river.
143. Whilst such systems probably appeared quite adequate at the time to provide the city-dwellers with almost unlimited supplies of free tap water, the situation has since been dramatically modified. In most cases, no major rehabilitation work has ever been carried out, due i.a. to disruptions in trade flows with neighbouring communist countries, which started to hit the domestic economy in the early 1990's.
144. Pumps fell short of repairs and sometimes stopped working; old water tanks did not have sufficient capacities to supply growing urban populations or upper floors of multi-storey buildings; leakages from old rusty pipes have been estimated at up to 70% in some areas.
145. The water that was still available became increasingly polluted. River feeds were often already contaminated by upstream sewage; towns had never been equipped with integrated wastewater management systems, and liquid wastes seeping from inadequate

sewage tanks regularly infiltrate leaking distribution pipes. The population is often seen fetching water from communal taps or nearby river beds, already full of garbage.

146. Comparable situation seems to prevail throughout the country. An estimated 60% of the population is thought to live in the main cities (Pyongyang, Nampo, Wonsan, Kaesong etc) and in the 204 county towns. The urban population is bound to be considerably more vulnerable to water-borne diseases than the rural one, which generally benefits from numerous springs and does not have large problems of wastewater management.

Relevance

147. As stated, the needs in water and sanitation -especially in urban areas- have appeared overwhelming, and humanitarian agencies have responded accordingly. Large quantities of free water supply in every city seem to have been a major achievement of government efforts, some thirty years ago. Authorities usually appear quite keen to restore water supply to anything approaching the official standards (150-200 litres/day/person). The chairman of the People's Committee in Munchon confirmed e.g. that water was the first priority for his town, even before food security.
148. Some DG ECHO partners were highly experienced in the sector (GAA); other partners with specific mandates (SC-UK, UNICEF) have considered water projects as a relatively soft 'entry point' from which they could expand activities and reach their main target populations. For example, SC-UK carried out in 2003 an assessment in the North-East, which led to the identification of i.a. the town of Tanchon. SC-UK was planning to follow its mandate and target primarily children and mothers, but it did not appear practical to focus on these groups alone when the whole population was quite vulnerable (each person received on the average only 27 litres/day of polluted water). SC-UK decided to use a (gravity-fed) water supply, sanitation and hygiene 'package' as a valid approach to supporting children and mothers, who were themselves seen as a key component of the overall population. The box below provides an overview of the relevance of SC-UK's multi-annual, integrated approach.

An example of programme logic in urban areas: the successive phases of the holistic approach followed by SC-UK/Unit 2 in Tanchon (South Hamgyong province)

In 2004, in accordance with the partner's mandate, the priority objectives were i) clinics with maternity rooms; ii) kindergarten and nurseries (water and sanitation, indoor washrooms with new windows, renovation of kitchens, blankets, mattresses, winter clothes until 2005); iii) mothers groups (a participatory approach to hygiene promotion) who complement section doctors in urban and rural areas (continued every year until now), and iv) training of technicians (also until now).

In 2005, 3 schools were targeted with water and sanitation and hygiene promotion (by children committees). One rural Ri was also targeted as a pilot project for integrated gravity-fed supply and sanitation. Unit 2 also channelled DG ECHO-funded aid from WHO to rehabilitate the operating theatres in the Tanchon city hospital, and provide medical kits.

In 2006, the programme was expanded to 12 other schools in Tanchon. An additional water tank and a booster station were built in town, together with a second (new) mainline for water supply, to prepare the closure of the old, rusty and leaking mainline for possible repair.

In 2007 (last DG ECHO funding), the urban population at large was targeted in Tanchon, as it was generally quite vulnerable. At first, out of the 5 urban Dongs in Tanchon, the two Dongs closest to the new tank and booster station were selected.

In 2008-9, with SIDA funds, Unit 2 is targeting the 3 remaining Dongs. The project is also preparing a proposal to the authorities for a low-cost, sustainable waste water management system.

149. After the government's decision of 2005 to stop humanitarian aid, water supply was readily perceived as a development-oriented activity, on which e.g. Concern or Triangle could further focus their projects.
150. As a result, DG ECHO has been by far the largest donor in DPRK in this sector³⁹, but many water systems had been left half completed at the end of 2005. Consolidation or completion of ongoing projects should therefore be seen as adequate for several reasons, including technical. The last phase of the water projects, carried out in 2007, was more focused on distribution networks, as most of pumping stations, catchments and main transmission lines had been done already at that stage. Without the conclusion phase, most of the water systems would have been spreading higher amounts of water in the towns. This water would have been leaking from old pipes and accelerating the bursting process due to increased pressure, as well as absorbing increased amounts of wastewater. A precipitated phasing out of water projects after 2005 would probably have been quite detrimental to many beneficiaries, most partners in the field, and also to the overall EU image in the country.
151. Nonetheless, neither the nature and extent of the risks, nor their solutions could arguably be contemplated within the scope of humanitarian emergencies. The causes of the problems were clearly structural and the responses are to be developmental. The potential scope of future works is still staggering; the total estimated costs for complete integrated systems of water supply, sanitation and wastewater management in medium-size county towns such as e.g. Hoichang and Kujang would probably amount to some € million in each case.
152. Additional water supply is even likely to increase health hazards generated by the general lack of wastewater management systems and of consistent quality testing – the latter function being ensured by MoPH (see below). As for Health, the solution depends from the setting up of an appropriate policy by the Ministry of City Management (MoCM), a sector in which UNICEF is currently taking the lead.
153. The relevance of the choice of the few towns which have benefited from rehabilitated water supply systems, seems to have been due to a number of factors, none of which was consistent with a particularly high level of vulnerability –compared to many other towns in DPRK- or a dire humanitarian emergency. Perceived needs or health concerns were generally key factors for decision. The quality of the water in Unryul (South Hwanghae province) suffered from a high concentration of limestone. In Unjon county (North Pyongan), the IFRC water and sanitation project was carried out to respond both to salty ground water and to the damages of recent floods. In most cases, an NGO had been

³⁹ An indirect consequence of this large funding is that sanitation is still widely seen as a humanitarian issue.

present in the past with previous small scale DG ECHO funded projects on health or rural water supply. Authorities seemed to prefer to keep the same partners in the same areas.

154. In many of the selected locations, the above was combined with some kind of national strategic (industrial, military) priority list. Kujang (GAA/Unit 4) is an industrial town of 20,000 inhabitants, with e.g. a coal mine and a large cement factory. Unryul (UNICEF) has a large iron ore mine, with the longest conveyor belt in the country. Munchon (Triangle/Unit 5) has some steel industry, and Tanchon (SC/Unit 2) operates an oil refinery. An underlying reason for their choice may be that the population in such places would need to be healthy to produce and perform more effectively.
155. The charisma of some local political figure may also play a role in some cases. The choice of Hoichang (Concern/Unit 3) may e.g. have been partly⁴⁰ driven by the strong personality of the Deputy Head of the county's People Committee, who was also instrumental in the project's success. Hoichang does not have any higher humanitarian vulnerability, but the town certainly has specific needs. The town is rather isolated, many areas are on steep hills, and people had to spend a longer time than usual going down to the river, queuing for polluted water, and then climbing back to their homes.
156. Some of the locations defy classification. Anbyon is not strategic and probably wealthier than most. The town was selected because it was the only one (out of five towns) in the Kangwon province where CESVI could not complete the work undertaken before its departure in the wake of the 2005 government's decision. Local authorities (and DG ECHO) were looking for an organisation to finish the project, and GAA/Unit 4 was preferred due to their achievements in Kujang. In a visited Ri around Anju (South Pyongan province), the main reason for the project seemed to have been that the village had to be moved together with its water supply, due to the construction of a new road.

Coverage

157. Overall, the nine county towns and the targeted surrounding Ris covered by the programme could only be a 'drop in the ocean' considering that comparable problems could probably be found in the main towns of nearly every county (204) in DPRK.
158. In most cases, the projects could reach the whole town population as well as key institutions such as hospitals, schools, etc. The visited locations provided the following figures:
 - in Hoichang (Concern/Unit 3), the coverage reached 99% of the overall population, as 12,807 households were supplied by the project out of 13,300;
 - in Kujang (GAA/Unit 4), 6,800 households out of 7,100 were covered –the remaining being extremely difficult to reach on high slopes or far-away outskirts;

⁴⁰ Hoichang has been reported as a mining area, although this could not be confirmed either by Unit 3 or by observation.

- in Anbyon (GAA/UNIT 4) the whole population of 15,880, also to the exception of a few isolated outskirts, has been supplied with water by the project;
 - in Unryul (UNICEF), the whole town population (6,500 households) has been connected.
159. In two towns (Munchon and Tanchon) only a portion of the total population has been reached. In Munchon, Triangle/Unit 5 had originally focused its activities on the city hospital, but further negotiations with the People's Committee resulted in the extension of the project to two urban Dongs (out of four). 7-8,000 persons (1,800 households) are currently supplied out of 42,000. Water supply also included one school, but left the 16 other key institutions of the town uncovered (7 schools, 4 nurseries and kindergarten, 4 clinics etc). In Tanchon, the current water supply coverage is also reaching two urban Dongs (5,200 households) out of five. SC-UK/Unit 2 is planning to supply the three remaining Dongs (7,523 households) in 2008-9, with SIDA funding. Interestingly, Munchon and Tanchon are also the only two visited towns where old rusty water mainlines were still operating in parallel to the new mainlines built by the projects, resulting in rather brownish water flowing from the taps.

Efficiency

160. The efficiency of partners working in water and sanitation projects was mostly quite commendable, considering the constraints. Achievements in DPRK depend essentially from the partners' capacity to establish and maintain fruitful relations of confidence and cooperation with the relevant local authorities, i.e. mainly the Head of the People Committee –who is also the implementing partner. Such a task requires strong negotiating skills by people at the appropriate level of authority as well as patience, which may not always be key features among emergency NGOs. It requires also consistency, which depends itself on presence, either through the setting up of local offices when this is allowed to foreigners (e.g. GAA/Unit 4), or regular field visits despite back-breaking road conditions.
161. Other constraints include e.g. recurrent problems of communication (there are no mobile phones), transportation of equipment on bad roads in difficult weather conditions, interruptions by floods, or poor quality of material and works. Most of the specialised tasks are carried out by a small permanent team of local technicians and skilled workers employed by the People's Committee. Larger construction works are performed through the mobilisation of the population by the same Committee (the so-called "social work"); it is not possible to inquire about the real feelings of the people involved in such works.
162. Despite the flexibility granted by DG ECHO to allow extensions in the case of problems (e.g. relating to shipment delays or quality of pipes), most concerned partners stressed the fact that the standard one year timeframe was not appropriate for this type and scope of activities, being far too short. Furthermore, the project cycle did not fit with local weather conditions. Water and sanitation contracts in DPRK should ideally have been signed in October (not January), to be able to dedicate the 3-4 winter months to

feasibility studies, procurement and deliveries, and to start the implementation when the weather improves, in February-March. In August, heavy rains and floods may interrupt the proceedings.

163. In such a framework, the long-term sectoral expertise of some partners (e.g. GAA/Unit 4) proved to be a definite added value. Hoichang (Concern/Unit3) was also a particularly remarkable technical achievement, having been carried out in very difficult conditions (isolated mountainous area, freezing weather and floods) and under strong time pressure, as the short timeframe of two successive DG ECHO's Decisions was far from conducive. The feasibility study, taking the various steep slopes into account, was another feat. One can only congratulate the partner –and the local workers!- for the high level of efficiency required to carry out e.g. the laying of 340 Km of pipes.
164. A possible issue in Hoichang could be found during the visit of two beneficiary households, which showed that the water taps were located over small storage tanks buried in the earth of the kitchen. Such solutions can be dangerous for small children who can fall into the tanks, but more importantly these tanks are bound to be quite difficult to clean (cleaning should be performed weekly, to avoid algae etc). The regular cleaning of domestic storage tanks could not be seen among the hygiene instructions distributed to beneficiaries. In comparison, the Red Cross (Anju, Unjon) or GAA/Unit 4 (Kujang) used elevated water tanks, leaving always an outlet to empty the tanks for cleaning (there were however no cleaning products available), and ensuring that all beneficiaries knew about weekly cleaning needs.
165. From an organisational perspective, the regular quality testing of the newly supplied water appears to be a general problem. Local anti-epidemic stations (AES) depend from MoPH and not from MoCM or the concerned town authorities. Despite the provision of some sets of testing kit and chemical reagents, the AES was not a part of the projects, and close cooperation was not the rule (an exception could be found in Hoichang, where the AES was specifically mentioned in the proposal, and where the evaluation could freely visit the AES premises). GAA/Unit 4 was e.g. not authorised to do any quality control itself, and it took no less than 5 months to have access to the results of the tests done by the AES⁴¹. In Munchon, Triangle/Unit 5 was never allowed access to the AES; they did not even receive complete water quality data, but only the results regarding the water pouring from by the spring included in the project –which were of course acceptable.

Effectiveness

⁴¹ As this kind of procedure by authorities is likely to indicate, something could indeed be wrong. Water quality data did not e.g. show E.coli, but indicated faecal coliforms well above German standards (100 MPN – Most Probable Number), but under DPRK standards, which areas high as 333 MPN. Also, the very fact that there were e.g. much lower levels of nitrate than reasonably expected due to suspected contamination by seeping sewage tanks (see GAA final report, page 20) may cast some doubts on the reality of the tests.

166. The specific objective of DG ECHO's Decisions regarding water and sanitation ("Reduce waterborne diseases") has been reached as shown in the Outcomes section below, although with a significant caveat. The same is true for the relevant component of the 2006 Decision "complete and consolidate the rehabilitation of water supply in (nine) cities and some selected surrounding rural areas". As per partners' proposals for the final Decision, the expected results should be assessed separately in terms of quantity supplied, quality of water, sanitation, hygiene, and sustainability.
167. Expectations regarding quantities have reportedly been fulfilled or exceeded –although this was difficult to ascertain in the short timeframe of the evaluation. It should however be noted that the various objectives mentioned in the proposals were difficult to compare, as they appear to have been expressed in quite uncoordinated manners⁴². For example, in Tanchon the quantitative objectives were "100 litres/person/day (l/p/d) for urban Dongs and 50 l/p/d in rural Ris; in Hoichang, the objective was stated per household (250 litres/day), which can concern on the average between 3 and 5 persons; in Kujang each household should be supplied with "24 hours running water"; in Anbyon, only the dry season supply was mentioned (45 l/p/d); finally in Munchon, only the hospital was allocated a quantitative objective in the proposal (60 litres/day per patient).
168. It is similarly quite difficult to put the above results in perspective with the extremely high official standards, obviously inherited from a more economically favourable past: every citizen should be entitled to 150-200 litres of (entirely free) drinkable water/person/day. Such standards, which were never really achievable and do not seem to take into account the dry season, are nevertheless still regularly stated as an objective by some local authorities (Anju, Unryul)⁴³.
169. The issue of quality has already been evoked under efficiency. As for the quantity, one may regret the disparities between the various quality standards mentioned in the partner proposals. SC-UK/Unit 2 aimed at applying the SPHERE minimum standards, and so did GAA/Unit 4 –although in Anbyon only. Concern/Unit 3 envisaged applying the WHO maximum admissible concentrations. No specific standards for quality could be found in Triangle/Unit 5's proposal.
170. The specific objectives of the proposals in terms of sanitation were generally quite minimalistic, which conversely tends to indicate a suitable level of knowledge from the partners regarding what might be reasonably expected in the framework of the programme. The same is true for the hygiene component, which is generally limited to outputs (training course delivered, leaflets distributed) rather than actual impact on behavioural changes.

⁴² These quantities were reportedly based on the yield of each water source.

⁴³ In Anju, a DPRKRC representative even mentioned a target of 400 l/p/d, and claimed that it was a SPHERE standard. When told that SPHERE recommended only 20 litres, he replied "yes, but that is for emergencies". High consumption and even wastage of water is still an 'ideal', even for otherwise competent professionals.

171. The concept of sanitation should include “hardware” (wastewater management, collection and treatment plants) and “software” parts (hygiene promotion). Both components are difficult to implement in DPRK because of i) a widespread lack of concern in the past (authorities have focused on quantities of supplied water rather than its quality, and sanitation was seen as a humanitarian not developmental issue), ii) the scale of the remaining needs (no integrated wastewater management system was ever planned in any city), iii) the need to define first an appropriate policy at the level of MoCM (this Ministry appears to be much in need of capacity building and advice), iv) budget and time (which are both far beyond the programming capacities of any agency currently present in DPRK).
172. Some doubt should also be expressed about the effectiveness of the “software” component of hygiene promotion in the short context of a humanitarian Decision. Although this is a relatively inexpensive and standardised package, developed in common with e.g. UNICEF and SC-UK (different manuals with a similar content), some leaflets and a few training-of-trainers workshops are hardly sufficient to change behaviours, especially if the trainees are not at all convinced that they might do anything wrong with their current practices. GAA/Unit 4 in particular decided to suspend hygiene promotion activities in 2006, as they found –when they were allowed to attend- that training workshop approaches were far more directive (“this was propaganda”) than participatory. While the effectiveness of the alternative approach of the 'Mothers' groups' adopted by SC-UK/Unit 2 for hygiene promotion is difficult to gauge, trained volunteers interviewed in Tanchon were able to explain what they had learned. Finally, the MoPH seemed rather reluctant in cooperating with hygiene promotion: granting permission and agreeing on leaflets can take up to 12 months, for very limited visible effects (children still play in open sewers and women still wash their clothes in highly polluted rivers).
173. According to WHO, there are some lessons to be learnt from the lower-than-expected effects from training in health capacity building. Shortcomings can e.g. be found as follows:
- there is no supervision and follow-up to training;
 - drugs used in training are usually not available in practice;
 - there is no access to further specialised books, literature, guidelines, or internet (MOPH is considering an intranet);
 - there is often also no exchange of lessons learnt and good practices between counties, because communication can be restricted for security reasons.
174. Sanitation activities as stated in the proposals did not consider the potentially negative longer-term results of the lack of regular and reliable quality testing, and ineffective wastewater management.

Outcomes and Impact

175. Every visited stakeholder agreed on the fact that the main sectoral outcome (increased quantities of tap water in the concerned towns and rural Ris) had produced a key *direct positive impact*, i.e. the incidence of diarrhoea was reported to have significantly dropped.
176. As it is often the case in DPRK, statements were however generally vague and anecdotal; no baseline studies would typically be available for the previous situation, and no precise figures would be provided for the current one. Decreases in gastro-intestinal diseases were usually reported as being “sharp” or “significant”. Standard approximations of “less 2/3, less 65-70% cases of diarrhoea” were the most frequent. There were also some lower, but similarly unsupported, figures. In Un Song Ri, Anju county, the decrease of water borne diseases after the completion of the Red Cross water project was described by the clinic director as “dramatic”. Before, there had been “high numbers” (no figures) of gastro-intestinal diseases, which were reduced “by 50%”. In Anbyon, the county hospital director gave a rather conservative estimation of 30% decrease in cases of diarrhoea between 2006 and 2007 (down from 15 to 10 cases per day); this figure covered however not only the town but also the whole county, where water supply had not been improved.
177. In some rare instances, figures seemed to be more accurate. In Hoichang, a polyclinic director gave a figure of 70-80% drop in diarrhoea cases for the last two years, which corresponds to the 2006 Decision’s timeframe. A primary school director in Kujang said that the daily roll call accounted for 93-94% of pupils two years ago, against 98% now – the main cause of absence being waterborne diseases. In the kindergarten of Pak Son Ri near Tanchon, the kindergarten director reported only 1 case of diarrhoea per month now, against 3-5 cases before the project. In the nearby Yang Pyong Ri, the director of the hospital stated that the number of diarrhoea started to drop 2-3 months after the completion of the water supply project, and was down by “50-60%” after 6 months.
178. Interestingly, the global, country-wide figures provided by the MoPH seem to reflect comparable trends, although these could not possibly be attributed to the DG ECHO-funded programme: 31,309 children under 5 (around 2% of total child population) were admitted to hospital with severe diarrhoea in 2006.
179. There were also a number of *indirect positive impacts*, including the following.
- The urban and rural water supply systems can often be considered as pilot projects for a future development programme. In this perspective, the 'WASH' water workshop of November 2007 has appeared as a good example of both accountability and consolidation and dissemination of lessons learnt for further institutional memory purposes, in the true sense of potential follow up and LRRD by other donors and agencies.
 - In the same perspective, another important indirect impact is that all concerned local authorities seemed to have been convinced of the validity of gravity-fed water supply systems, wherever such systems could technically be adopted. Most authorities were

- originally in favour of more high-tech solutions –e.g. rehabilitating costly pumping stations.
- A regularly reported impact of additional supply of tap water was a decrease in the time needed to fetch water from outside (well, river), in particular for women. Although such tasks were certainly quite painful and time-consuming in some cases (apartment blocs), this type of impact can hardly be considered as closely related to a humanitarian emergency.
 - The model of low-cost, low-tech rural household latrine promoted by SC-UK/Unit 2 around Tanchon had been adopted by the authorities and was being widely replicated⁴⁴.
 - Thanks partly to the large involvement of DG ECHO in the popular water sector and its decision to complete and consolidate the projects after 2005, the EU benefits from a very positive image among the concerned authorities.
180. The multiplication of water quantities used can be seen both from a *positive* perspective (more water is available to the beneficiaries, hygiene practices may improve), but also from a potentially *negative* one: the absence of water price and advocacy on responsible use may be leading to unnecessary wastage. The final report from GAA/Unit 4 for Anbyon indicates that water supply –and consumption- have roughly doubled, from 70 l/d/p to 147 l/d/p (pages 18 and 20). Some statements by visited beneficiaries may indicate an even greater increase. A beneficiary in Kujang said that she was using “at least five times more water”. Other visited households in Unryul and Anbyon estimated average increases at three times the previous quantities of water. A beneficiary in Unryul said that he “did not count it anymore”, and another in Anbyon stated that there was now “so much water that she could not have imagined it before”.
181. An *indirect negative impact* concerns the corresponding increases in wastewater. In the general absence of wastewater systems -no covered collectors or treatment plants were ever considered, even when the towns were planned or expanded by the government-, increased water supply is bound to produce more sewage. Used water in urban areas goes either straight into open ditches (where children can often be seen playing) and then into rivers (where laundry is still regularly being washed), or into inadequate sewage tanks (these are not septic tanks, being open at the bottom to allow free seepage into the ground). During the rainy season, it can also overflow in the middle of the towns, thereby creating more severe health hazards until solutions can be found - and financed. Newly supplied water is also sometimes likely to be contaminated by seepage into old leaking and rusty pipes, which are still in place e.g. in Munchon and Tanchon. Waste water management is not a significant problem in rural areas, due to the lower numbers of households, and the direct use of the water into the surrounding fields.
182. Solid wastes from tanks have to be emptied by hand by the residents themselves through 'social work' much more often (“before once every two months, now twice per month”),

⁴⁴ This was however not the case with its urban counterpart. The visited "demonstration communal latrine" in Tanchon was not properly maintained. There were only 4 toilets (2 for men, 2 for women) for 45 households (at 3-5 people each) in the neighbouring building, to which must be added the passersby.

which balances somewhat the time gained from fetching water in the river. Wastewater management is the remaining challenge most commonly stated by all concerned authorities, together with the lack of financial support from MoCM to deal with the problem.

183. Medium- and longer-term health impact of increased sewage seeping are hard to assess, but can undermine the short-term benefits gained from improved water supply. The director of the Anbyon county hospital stated for example that there were “much effects” on health and “increased gastro-intestinal diseases” in the rainy season due to overflowing sewage tanks, without supporting statistics.

Sustainability

184. The sustainability of water supply projects is generally jeopardised in the medium term. Committed local authorities usually lack adequate budgets to maintain water systems. Even basic quality testing reagents or chlorine may be in short supply once the quantities provided by the projects have been used. Funds must be provided by MoCM, which has not shown significant support up to now; this situation may perhaps change – funds permitting- in the framework of the International Year of Sanitation. In Kujang, chlorine could already be seen to be lacking at the water source, despite promises by local authorities. As no cost-recovery scheme would be acceptable to the government policy (water must be free of charge), no additional financial resources could be expected in the foreseeable future.
185. Projects have supplied most spare part for a few years of extensive use, but beyond that the purchase of foreign-made spare parts can be rather difficult and expensive. Replacement of e.g. broken taps or flexible hoses can generally be bought in Pyongyang, but raising of the financial resources, establishment of related contacts and the drive to the capital can not easily be shouldered by the communities. For other spare parts provided e.g. by Chinese suppliers, replacement of worn out material will be almost impossible. One of the major problems of the operation, maintenance and repair of the water supply systems will occur during the freezing period in winter. Frozen water in the pipes may often result in bursting fittings if the in-house installations are not operated adequately.
186. A pilot project of decentralised wastewater management, funded by AusAid and implemented by UNICEF in Yontan, is due to start in April, and be completed at the end of July 2008. The estimated cost would be around 20-25 US\$/beneficiary. UNICEF has taken the lead in the matter, coordinating closely with MOCM and trying to provide the Ministry with much needed capacity building. A seminar is due to be organised in September or August, to disseminate lessons learnt.
187. In the same perspective, LRRD plans of GAA/Unit 4, the leading EU agency in the water and sanitation sector, include a Phase III (drainage and waste water system) for the towns of Kujang and Anbyon, although this may be financed with Norwegian (not

German) funds. In Hoichang, comprehensive wastewater plans are similarly “being considered” by Concern/Unit 3 and the local authorities.

Conclusions and Recommendations

188. In the water and sanitation sector, DG ECHO has gone as far as it could probably go, and beyond. Despite their size, the funded urban water supply projects are only a “drop in the ocean” compared to probable needs, but they were useful in setting up practical examples of what might be done and how.
189. By engaging –much beyond the usual humanitarian rehabilitation- in large urban water and sanitation works which, contrary to medical consumables, are supposed to be sustainable (and not detrimental) by nature, DG ECHO has also engaged to a certain extent the overall responsibility of the European Commission in ensuring that the results of these works should not bear any foreseeable negative impact for the beneficiaries.
190. As already mentioned, by multiplying the water supply without proper corresponding wastewater management, the water projects have *de facto* created some additional health hazards for the future. The 2004 evaluation had already recommended that "Projects should never be undertaken where lack of wastewater management is likely to negate the impact of the project".
191. The solution –if there is one- could definitely not be contemplated within the mandate of DG ECHO, nor is the current situation in DPRK favourable for such a task. The local authorities, which were aiming primarily at an increase of the quantity of water supply and have not been overly concerned with its quality so far, are generally quite satisfied. MoCM, which should be in charge of defining a wastewater policy, still badly needs capacity building⁴⁵.

Recommendation

The issue should nevertheless not be overlooked in the medium term in the 3Cs framework, and DG ECHO should advocate with DG AIDCO to consider in due time relevant types of support to MoCM, to help mitigating the possible negative consequences of the lack of wastewater management in past projects.

⁴⁵ It should be noted that ECHO funded a sanitation workshop in Kujang in order to raise awareness among local stakeholders (including mainly MoCM staff) about waste water management and to look for appropriate technologies for the DPRK context.

B.2.4. Food aid and Nutrition Sector

The sector of food aid, which had been funded by DG ECHO up to 2005 only, was not considered as a focus in the TOR of this evaluation. The present chapter will therefore mainly provide some background information on food aid, as well as updated findings on nutrition.

Summary table 4

Year	Partner	Contract n°	Amount (budget)	Activities
2004	UNICEF	01010	Approx. 50% of €1.8m	(Project component) nutritional support to young children, pregnant and nursing mothers
	UNICEF	04007	Approx. 25% of €2.15m	(Project component) supplementary feeding for vulnerable children and women
2005	UNICEF	01010	Approx. 15% of €2.6m	(Project component) supplementary feeding for vulnerable children and women
	WFP	02001	€3m	12,700MT of food aid (cereals, pulses) to vulnerable children, pregnant and nursing women
2006	NA	NA	NA	NA
		Total	€4.85m	

Background

192. With only 17-22% of arable lands, food security is probably the “Achilles’ heel” of DPRK. For reasons that remain essentially unclear to this date (natural disasters but also possibly the political vacuum caused by the death of president Kim Il Sung), the food production has dramatically declined in the mid 1990s, resulting in a terrible famine. By 2004, statistics (below) indicated that the country seemed to be gradually recovering.

Relevance

193. The relevance of continued humanitarian food and nutrition assistance through emergency funding had already become rather questionable in 2004. Successive surveys indicated a continuous improvement of the situation after 1998, with figures becoming gradually comparable to those published for some other Asian countries that would get development aid only. The UNDP Human Development Report for 2004 indicates e.g. that the stated percentage of underweight children of less than 5 years old in DPRK (23%) was lower than e.g. in Cambodia (45%), Laos (40%) or Vietnam (33%).

194. The following figures have been taken from internationally recognised surveys in 1998, 2002 and 2004 (e.g. Nutritional Assessments made by WFP and UNICEF).

Table 5

	1998	2002	2004

Chronic malnutrition or stunting (low height-for-age)	62.3%	41.6%	37%
Underweight (low weight for age)	60.6%	21%	23%
Acute malnutrition or wasting (low weight-for-height)	16.6%	8.5%	7%
Severe acute malnutrition	3%	3%	1.8%

195. A national survey, carried out in 2006 without international support, reported similar findings. The 2004 nutrition survey also found one third of mothers with children aged less than 2 years to have mild anaemia with haemoglobin measured as less than 12 g/dl, but only 0.5% were found to have moderate to severe anaemia (haemoglobin less than 9g/dl). The MoPH reported 25,664 hospital admissions for severe malnutrition in 2006 (1.5 percent of the estimated number of children aged less than 5 years). There was no information on rates of recovery.

196. The proposals made by the partners to DG ECHO seemed therefore to have been based merely on the continuation of ongoing humanitarian programmes, rather than on an analysis of the situation which may have helped to anticipate and mitigate the effects of the government's decision of November 2005 to stop humanitarian aid in favour of development-oriented activities.

197. The WFP in particular, faced with a sharp shortfall of food aid financing from its main donors (especially USA) in the aftermath of the nuclear standoff and the abduction of Japanese citizens, would reportedly have felt obliged to shut down its network of food factories in DPRK without new funding by June 2005 –which corresponded to the beginning of the contract with DG ECHO. The resident AIDCO Food Security expert had also reported that the FAO-WFP needs assessment done at the end of 2004 – on which the concerned WFP EMOP (Emergency Operation) was based and in which the expert had participated – had probably overestimated the food gap deficit.

Coverage

198. The intended coverage in the partners' proposals was aiming at the whole population of young children and vulnerable mothers, in every accessible county of DPRK. UNICEF was targeting more than 2 million children (up to 6 years old) and 300,000 pregnant and lactating women in 2004, and slightly less in 2005 (1.8 million children and 298,000 mothers). WFP was aiming at 1.5 million children in nurseries and kindergarten, and also 298,000 women in 2005. The two programmes were closely interlinked, covering the same groups. UNICEF's supplementary feeding (in projects 2004/04007 and 2005/01010) was meant to be processed in WFP-managed food factories, for the production of fortified biscuits.

199. As it is often the case with international agencies, DG ECHO funds were only a part of larger programmes, and attribution is hard to assess. The €3m granted to WFP were for example a portion of a €19.4m EMOP (the agency had launched an appeal for €78.2m).

Efficiency

200. The efficiency level was generally low. For the project 2004/01010, UNICEF had been relying on the warehousing and distribution system of the MoPH. Feedback from the Ministry was often late and inaccurate, and field visits demonstrated considerable gaps in the distribution. The monitoring capacity of UNICEF seemed also to have been inadequate: it was noted that over a one-year period (between June 2004 and July 2005), only 83 institutions had been visited out of the 39,000 targeted by the project.
201. The WFP project was significantly delayed by procurement and logistics problems. The food aid was supposed to have been distributed between July and September 2005 to respond to acute needs, but in November WFP submitted a request for the modification of the original 12,700 MT of wheat and pulses into dried skimmed milk, soybeans and maize.

Effectiveness

202. WFP's organisational capacity – and subsequently its effectiveness - were very negatively hit by the government's decision at the end of the year (WFP had reportedly been informed in September 2005 already). The agency had to stop all of its food distribution and monitoring by mid-November, close its 5 sub-offices in the country, and reduce its staff from 50 persons to 10. Production of fortified food was halted in the 19 factories, a measure which also affected UNICEF's supplementary vitamins and minerals.
203. The food and ingredients which could not be distributed before the decision's deadline were thereafter used by the government, and the partners can only presume that they have reached their intended destination.

Outcomes and Impact

204. An MoU on food fortification – in which DG ECHO did not take part, having disengaged from the sector - was later negotiated between the government, WFP and UNICEF. WFP modified its operational settings from the humanitarian EMOP into the more development-oriented PRRO (protracted relief and recovery operation)⁴⁶. The agency was allowed to maintain support to 7 or 8 food factories (instead of 19), to which UNICEF could still provide raw materials – funds permitting. Food items for therapeutic use are currently the milk-based F-100 and peanut-based Plumpy' Nut. Stocks are kept at the Central Medical Warehouse in Pyongyang, and therapeutic feeding has been limited to the Provincial Paediatric Hospitals.
205. The registered decline in the proportion of children with severe acute malnutrition may perhaps be partly attributed to the concerned projects, which were also aiming at

⁴⁶ This may be an interesting study case for the EC, as PRRO is relatively equivalent to LRRD, but with attached budget and programmes.

prevention. Very few cases of malnutrition could be seen by the evaluation, and no indications or observations could positively substantiate any major food deficiency. Hospitals and clinics generally reported a minimum number of cases, which mostly concerned children under 2 years old with breastfeeding problem. When asked about malnutrition, various respondents in other health and social institutions visited said that children were weighed monthly (or quarterly), and that supplements of soya milk and glutinous rice were given to those who failed to gain weight for several months. An exception was found at the Sariwon Paediatric Hospital, where two cases of severe malnutrition were observed. Although admitted to hospital several weeks earlier, they were not recovering. Both children were said to be living in orphanages.

Sustainability

206. The observed management of severe acute malnutrition does not appear effective, though. This demonstrates that the availability of diagnostic and therapeutic means in itself does not guarantee their appropriate use. Collaboration between national and international professionals in health and nutrition has been a low priority in the DPRK. Cultural and political barriers to communication have had a negative influence on levels of knowledge transfer, reducing the potential for lasting change.
207. It should also be noted that there is currently a renewed concern about food availability. The FAO and WFP have decided to issue a pre-alert signal, based on low production figures and sharply rising prices of rice on the domestic market. According to the two agencies, the food production may be back to 2001 levels, without the benefit of international food aid. To the estimated gap of 900,000 MT (5.2 million MT are required, whilst 4.3 million MT are thought to be produced locally), the 2007 floods may have added a further deficit of 4-600,000 MT. If the ROK fails to deliver the expected 350,000 – 500,000 MT and the 4-500,000 tons of fertilizers, the situation may become unpredictable.
208. According to DG AIDCO's Food Security expert, however, this analysis is exaggerated. The expert argued that the actual extent of the gap has never been substantiated, since e.g. farms would often refrain from giving real production figures to the government (to be able to keep some of it), and the "marginal lands" (hillside) production, which may amount to 1 million MT, is not considered in official figures.
209. The environmental aspect of hillside cultivation and the increased devastation they seem to provoke by strengthening floods, should nevertheless also be taken into account in the global equation of sustainable development. The lack of tenure to the land tends to undermine the sense of ownership and the seeking of sustainable solutions, such as cultivated terraces. Benefits of increased outputs from marginal lands should be seen in the short or medium term perspective only, as increased floods are bound to devastate more prime agricultural fields in the wetlands.

Conclusions and Recommendations

210. Although health and nutrition conditions seem currently to be stable in DPRK, the food security situation may still rapidly deteriorate to humanitarian vulnerability in a country with scarce arable land, undergoing a dire economic crisis, and subject to recurrent devastating floods. This may be combined with a damaging institutional policy of denial-until-it-is-too-late. This possibility was already stressed in DG ECHO's Operational Strategy for 2007: "the risk of a relapse into famine, as long as there is no progress in resolving the wider political issues and the economic opening of the country, means that the possibility of new interventions cannot be ruled out".⁴⁷

Recommendation:

DG ECHO should be prepared to respond to emergency appeals for food aid.

⁴⁷ http://ec.europa.eu/echo/pdf_files/strategy/2007/strat_2007_en.pdf

B.2.5. Cross-Cutting Issues

B.2.5.1. Children

211. DG ECHO stated priority on children could consistently be found throughout the various sectors. Nation-wide support to health and nutrition of vulnerable young children and nursing mothers was a key component of UNICEF contracts in 2004 and 2005. The supply of essential drugs to more than 5,000 healthcare centres and of IV fluids was essentially meant to respond to the most frequent acute diseases affecting children, i.e. diarrhoea in summer and ARI in winter. Rehabilitation of hospitals by e.g. WHO was focused on improving safe deliveries and pre- and post natal care. Water, sanitation and hygiene promotion projects had originally been focused on institutions caring for children (nurseries, kindergarten, schools, hospitals), which had been refurbished. Partners with dedicated mandates (UNICEF, SC-UK) have used water and sanitation projects as an entry point to reach ultimately their main target groups, as a key component of the overall population.
212. The vocational training school for deaf/mute children supported by HI/Unit 7 (see also B.2.5.3) in Wonsan was moved into town in 2005, with DG ECHO funding. In this respect it is still a pilot project, since authorities are not keen to show destitute groups such as the disabled and the isolated elderly (below). The seven other such schools in DPRK are all still "hidden" in the countryside. 120 children (70 of whom are in the boarding school) from 10 to 19 years old are learning skills such as sewing and beauty making for girls, carpentry for boys, hair cutting and computers for both. The children benefit from an adapted curriculum (at a slightly lower level than the normal one) There is also still much to do in terms of capacity, as the eight schools together cover only an estimated 20% of the country needs. The sign language has been adapted to Korean, although this does not make it understandable to foreigners. Graduated children are reported to be well integrated into professional life; there is no problem to find jobs, as these are provided by the State.
213. There were a few drawbacks, which were mostly not under the control of the partners. IV fluids produced in provincial hospitals are usually not distributed to nearby paediatric or maternity hospitals. The capacity of hygiene promotion training to modify established behaviours, such as letting children playing in open sewage drains, is a very long-term objective. As international agencies cannot have any influence on the content of national curricula, rehabilitated schools may actually disseminate a more effective propaganda for the regime. A Kindergarten in Unjon displayed freshly painted horrific war images. The basic course in the sign language in Wonsan concerned an apology of M. Kim Il Sung. Conversely, there was also some defiance from the authorities concerning a language that is not widely understood, and which may potentially be used for "uncontrolled activities".

B.2.5.2. Gender Issues – Maternal Health

214. Although hospital delivery of first babies and pregnancies at risk was said to be preferred, around one third of women deliver their child at a clinic or at home.⁴⁸ Home deliveries are most frequent during winter, when fuel for heating health structures is in short supply. While most deliveries (98%) are attended by a health care professional, use of the partograph⁴⁹ is not common practice and intra-venous (IV) fluids are not routinely available at the clinic level. At the majority of health structures visited, there was no oxytocin⁵⁰, except for some expired left-over stock. Recent midwifery training programmes conducted by EUPS 2 and 3 and by the IFRC included training about the partograph, but record sheets have not been made available.⁵¹
215. Though the average number of ante-natal visits is very high at 18 per pregnancy, consumption of iron-folate⁵² and multivitamin tablets in pregnancy and lactation is thought to be low. Capacity to carry out laboratory tests is limited, especially at clinics. Even if pregnancies at risk are correctly diagnosed and referred, obstetric emergencies occurring during or after delivery will have to be dealt with. The means to stabilize obstetric emergencies before referral are lacking at the clinic level. The team noted that several of the county hospitals, which should be able to provide comprehensive emergency obstetric care, were insufficiently equipped with materials for safe transfusion, IV fluids and essential drugs for life saving interventions. UNFPA has plans for nationwide distribution of iron-folate and oxytocin starting this year.

B.2.5.3. Disabled

⁴⁸ Analysis of the situation of children and women in the Democratic People's Republic of Korea, p. 68, UNICEF, 2006

⁴⁹ The partograph is a graphic representation on a pre-printed chart of labour in childbirth. The charted record of findings at successive examinations makes it easy to recognize failure to progress and informs the birth attendant on when to act in case of problems. All women in labour should be monitored using a partograph. (Life saving skills manual, essential obstetric and newborn care, The Royal College of Obstetricians and Gynaecologists in partnership with Liverpool School of Tropical Medicine, WHO, Liverpool Associates in Tropical Health, 2006)

⁵⁰ Oxytocin can be used to increase uterine contractions during and after childbirth. During "active management of the third stage of labour," the birth attendant gives an injection of oxytocin (10 units, intramuscular) to the mother within one minute after delivery of the child (and after making sure that there is no additional baby). The Royal College of Obstetricians and Gynaecologists (RCOG) promotes the practice as an effective method to reduce the risk of post-partum bleeding. (Life saving skills manual)

⁵¹ At Kowon County hospital, partographs were available and had been used correctly. The hospital benefited from intensive support from UNICEF, as Kowon was one of its "focus counties," but was closed to follow-up after 2004.

⁵² Anaemia in pregnant women aggravates the effects of maternal blood loss and infections at childbirth, and is thereby a major contributor to maternal mortality in the postpartum period. The 2004 nutrition survey found one third of women with haemoglobin below 11g/dl, classifying the DPRK as a country where anaemia is a *moderate* public health problem. (Reference: WHO/UNICEF/UNU Iron-deficiency anaemia: assessment, prevention and control Doc. WHO/NHD/01.3, 2001) Combined oral preparations of iron and folate can be used to prevent deficiencies in pregnancy.

216. Handicap International/ Belgium (HI) has developed since 2001 (the first contacts took place in 1998) a remarkable cooperation with the Korean Federation for the Protection of the Disabled (KFPD), which had evolved since 1998 from a status of mere association (KASD, the Korean Association for Supporting the Disabled) into a full-fledged Federation (in 2005) with significant HI support. HI and KFPD have been integrated into the Unit 7 of EUPS. It should be noted that this is the only EUPS Unit for which the national counterpart is not the MFA. Unit 7 have been providing support i.a. to the Hamhung orthopaedic factory (see chapter B.2.2.3). The total cost of sectoral DG ECHO funding since 2001 has reached some 2 million Euro, a significant investment.
217. KFPD is heavily involved in advocacy and the promotion of rights for the disabled. It has even succeeded in 2003 in convincing the National Assembly to adopt a specific Law on Rights; as a result, disabled are more frequently seen outside (in large cities only so far), and 16 disabled were admitted for the first time in 2007 at Pyongyang university. The Federation also operates i.a. a rehabilitation centre for the physically disabled, and has published a number of booklets, including a dictionary of signs language in Korean. Since 2005 and building on its enhanced status, KFPD is setting up various provincial associations for the blinds, the deaf, etc. Upgraded curricula for physiotherapy (10 years project) are being prepared, by having foreign trainers coming for 6 months periods.
218. Indirect, longer-term impacts are therefore multiple and vibrant. KFPD is now confident enough in their own capacity to e.g.:
- develop projects for international organisations and raise funds themselves;
 - expand their activities to reach all kinds of disabilities;
 - establish relations with other key international counterparts (on top of HI), such as the China Disabled Federation;
 - organise regional trips, e.g. to Vietnam and India in May 2008;
 - operate mobile teams to disseminate awareness and information throughout the country, and initiate specialised studies.

Some key **lessons** have been learnt by Unit 7, i.a. the following. "To achieve valuable results in a relatively short time in DPRK, one should: i) establish a close partnership with the Korean counterparts; ii) accept and follow the rule; iii) develop as much as feasible local production instead of trying to import products from abroad".

It should be noted that such recommendations could only apply to the most "mature" partners in specific contexts such as DPRK. Pre-conditions include: the capacity to analyse the situation and negotiate with authorities, at the appropriate management level; a highly committed local counterpart, with relative independence; the possibility to focus on the agency's core mandate, despite local agendas. A specialised mandate is therefore more suitable than multi-sector assistance.

B.2.5.4. Elderly

219. Until 2006, Triangle (EUPS Unit 5) has provided support to isolated elderly people, i.e. those who do not have children. This is undoubtedly a highly vulnerable group in the "confucian" DPRK society, where parents are supposed to rely on their children for their well being. Destitute elderly tend furthermore to be hidden by authorities.
220. Triangle has been working with a local partner, HelpAge DPRK. This organisation has received capacity building, but the support does not seem to have been quite so successful as for KFPD. HelpAge DPRK has also progressed from an Association to a Federation status and has been recognised by the Ministry of Labour. It has however not become a full counterpart for Triangle, nor has it managed to become a member of HelpAge International; the lack of continued funding prospects may therefore impact severely on the sustainability of the Federation's activities. SIDA has allocated some funds after April 2006, and an ROK NGO ("Lighthouse") is also trying to operate in the sector.
221. 24 centres for isolated elderly exist in DPRK, each accommodating between 100 and 200 persons. Out of these, six (three per phase, under two successive Decisions in 2004 and 2005) have been supported by the project with rehabilitation of buildings, water and sanitation, and medical assistance. Out of an estimated 4,000 persons accommodated in the 24 centres, approximately 1,000 have therefore benefited from the project, although it is not known how the selection of the six centres had been made. It is also unknown how many untreated cases, out of a population of 23 million, may be -or not- on the waiting list for the centres, as no figures –even rough ones- were provided.
222. Two of the six elderly home were visited, in Taesong, some 60 Km from Pyongyang, and near Munchon on the East coast. In each case, the centres were said to cater for some 200 elderly, mostly women aged between 70 and 80. Munchon was also the only such institution nationwide to accommodate old couples (12). In Taesong, some younger mentally handicapped persons were also found, semi-hidden in a separate building.
223. Rehabilitation generally included new doors and windows, better isolation, refurbished cooking and dining places, and improved sanitation facilities. Green houses had been successfully set up. In Taesong, problems had 'recently' developed with the provided Chinese water pump. There were no spare parts to be found, and running water was therefore not available any more. The lack of water had i.a. affected the two solar heating systems which could not deliver any warm water, and coal for heating seemed to be in short supply. Impact from the project can be found in the enhanced dignity to live in an improved environment and some better comfort.
224. Primary health care facilities (a doctor was attached to each home) seemed empty of both patients and medicines, except paracetamol and a limited supply of one sort of antibiotic. The Taesong doctor stated that, when the local treatment was not adequate, patients had to be hurried to a hospital (where there is no revalidation service), but this happened "only 5 or 6 times a year". Such a figure seems quite low for a population of 200 elderly, with a turnover of about 15 beneficiaries per year. The car which had been used to carry the sick to the hospital had broken down.

225. Both centres looked quite isolated, in poor rural districts (the directors explained that locations were "healthy" and had "good water"). The reportedly strong influence of MFA on HelpAge DPRK did not appear to favour openness either; access to the elderly centres had e.g. been denied to Triangle after the completion of the projects. Worse, in both centres only a handful of elderly (around 40), all in seemingly good health, could actually be seen. Directors replied that the others (some 80%) had either "gone to visit their relatives" (they are all without any children), were "working in the fields" (none could be seen), or were "nursing little children in nearby homes" (possible, but there were not so many nearby homes, and little children were mostly playing outside in the sun without any surveillance). A reasonable assumption would therefore be that the sickest had been hidden or evacuated before our arrival, as we were not supposed to see such destitute people in the orderly DPRK society. One can only hope that this had been done in relatively humane conditions...

B.2.5.5. Aid Workers – Access and Working Conditions

226. As already mentioned in the chapters on Constraints and Principles, the notion of access is quite restricted and needs to be duly qualified in DPRK. Access to the projects' locations have therefore been a recurrent thorny issue for the partners, especially where remote sites had to be reached after long back-breaking travels on bad roads. After the 2005 government's decision and the closure of e.g. all the WFP field offices outside Pyongyang, the situation became even more severe. Nevertheless, GAA/ Unit 4 for example could set up and maintain during 2 years a field office near Kujang. The partner confirmed that it took a certain time to properly negotiate the issue, but that no other special difficulties were encountered. The same was true in Anbyon; whilst CESVI had previously had very scant access ("one visit every other month"), GAA/ Unit 4 insisted on making access a pre-condition for accepting to complete the project, and obtained it. Another successful example is HI/Unit 7, which is using – out of the peak holiday period - a convenient sea bungalow near the orthopaedic workshop of Hamhung.

B.2.5.6. HIV/AIDS and Other Communicable Diseases

227. There seems generally to be still a state of denial or ignorance regarding HIV/AIDS, to the exception of the WHO-supported blood centres, national and regional, where systematic testing was said to be carried out. Some information has also reportedly been shown on television, but its relevance and impact is unknown. In the delivery room of the Tanchon county hospital for example, after confirming that "all" tests had been made according to the training received, the doctor in charge replied to our specific question: "HIV/AIDS? No, we never do any such test, there is no HIV/AIDS in DPRK".

228. No figures are available, but infection rates are generally thought to be low. At the national blood centre in Pyongyang, the tests on 100-120 donors per day have so far been negative. The Confucian, closely family-centred type of society and the sheer lack of space in cramped flats with several generations living together, as well as the lack of

outside opportunities for meetings (there is some dancing in the cultural centres but of course no discotheques) are bound to reduce transmission risks significantly. Sexual intercourse between citizens and foreigners in the country is almost unthinkable. Nevertheless, there are also some worrying factors. Cross-border contacts with China – where prostitution can easily be found- are increasingly frequent. Study missions are regularly travelling abroad e.g. to various Asian countries (although under tight control). Despite societal barriers, entertaining mistresses is possible for those who have the means, and cases of prostitution are regularly being whispered about.

B.2.5.7. Effects on the Environment

229. The evaluation TOR did not mention emergency relief in case of disasters (e.g. Decisions concerning the 2004 train accident in Ryongchon or the 2007 floods); this issue will therefore not be a part of the current assessment, except as a possible factor for evolution (chapter B.2.1.2).
230. As already detailed in chapter B.2.3, some effects of DG ECHO funded projects on the environment are likely to be felt in the medium to long term, due to the increase of water supply and the corresponding general lack of wastewater management in the rehabilitated urban areas.
231. In a more global perspective, the problem of extensive deforestation for reasons of heating or "marginal lands" cultivation (on hillside slopes of more than 15%), amounts to a potential major man-made cause for future disastrous floods. The Chairman of Munchon's People Committee remembered e.g. the time when surrounding hills were "covered with trees". These are now almost completely bare, as "people have been cutting all the wood during the hard recent years for heating themselves in winter". This important issue has been considered in the framework of the DG AIDCO Food Security programme. Reforestation is also a core concern for e.g. the EUPS Unit 3, and the government is trying to launch a campaign, with the motto "cut one tree, plant ten". It should be noted that local stakeholders would readily emphasise the actual or supposed detrimental effects of global warming on the economic situation of DPRK, as these may help to dim some of the consequences of bad governance.