

# Prioritizing Humanitarian Assistance in a Complex Emergency: A Decision Method for Military Forces

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*The article develops a decision support model for a military commander who has to determine what humanitarian assistance will be provided in cooperation with which civil organizations in peacekeeping situations. After an investigation of the current methods decision theory was used to develop an initial decision method, consisting of consecutive steps to inventory potential humanitarian tasks, to identify attributes to evaluate these tasks, and to actually prioritize the selected tasks using an extensive scorecard. The initial decision method and its tools were reviewed in-depth in a series of expert interviews, resulting in an improved decision method.*

## INTRODUCTION

Following the end of the Cold War, international conflicts shifted from interstate conflicts to predominantly intrastate conflicts. These conflicts are often referred to as complex emergencies. A complex emergency is characterized as a humanitarian disaster that is due to a political or ethnic conflict and that causes massive population movements, a shortage of food and health care and in which political authority and public services have deteriorated or completely collapsed.<sup>1</sup> In recent years the international community (NATO, UN or a coalition of the willing) responded to a number of complex emergencies by establishing peace support operations. The main objective of multinational peace forces, such as Kosovo Force (KFOR), International Security and Assistance Force (ISAF) and Stabilization Force Iraq (SFIR) is to provide a stable and secure environment. In order to support the mission military forces<sup>2</sup> carry out humanitarian tasks<sup>3</sup> (e.g. distribute food or reconstruct schools) besides the traditional military tasks (e.g. combat activities to separate belligerents). This is also stressed in NATO's doctrine AJP-9.<sup>4</sup> In this study we define humanitarian tasks as all activities that are outside the traditional military core business and that concern the provision of

relief to a suffering population, the support of local and national authorities and the support of humanitarian and civil organizations, in both humanitarian and peace support operations.

When performing humanitarian tasks military organizations often work together with civilian organizations (e.g. Non Governmental Organizations (NGOs), International Organizations (IOs), donor organizations). Civil-military co-operation ('civic') is the term commonly used for the co-operation between civilian and military organizations when performing humanitarian tasks. Problems encountered in civic practice are among others friction between humanitarian and military organizations (e.g. humanitarian organizations fear competition and are afraid that their neutral status will be harmed) and lack of expertise in humanitarian tasks among military organizations. According to Slim,<sup>5</sup> humanitarian tasks carried out by military forces should be planned in consensus with humanitarian organizations to prevent friction, competition and wasting of resources due to bad allocation. A clear division of tasks between military and humanitarian organizations will contribute to an effective and efficient use of both military and humanitarian resources in peace support operations. Moreover, it will contribute to the prevention of mission creep for a military organization.<sup>6</sup>

The humanitarian tasks that are performed by the military in a peace support operation vary and depend inter alia on the mandate, the political agenda, the situation in the area of responsibility (AOR) and the view of the commander. The number and content of humanitarian tasks is open to a wide interpretation at lower levels. For example, the mandate may include 'the promotion of a stable environment'. This can be achieved through a wide array of activities ranging from building political institutions and providing economic aid to collecting weapons and arresting war criminals. Since a military organization has limited resources available, the military commander at tactical level will have to decide to which tasks he will give priority. Although restricted by strategic and operational boundaries, these decisions are often based on the commander's own insights and experience and the advice of his staff officers. Disadvantages of this present decision making method include:

- different commanders may take different decisions in the same situation;
- it is difficult for a commander to justify why he has taken particular decisions;
- communication and evaluation are complicated;
- transferring knowledge is not done in a standardized way, so important knowledge may be lost by change of commanders.

The aim of the current study is to develop a decision method, which facilitates a military commander to prioritize the humanitarian tasks that

could be carried out or supported by his forces. Advantages of such a method include:

- a more sustainable follow-up of these activities (e.g. by transferring them to humanitarian counterparts);
- humanitarian organizations are familiar with the humanitarian tasks performed by the military organization;
- explicit decision making can contribute to communication and negotiation (e.g. with humanitarian counterparts);<sup>7</sup>
- decisions made in a formal framework are easier to justify, evaluate, and improve;
- knowledge will not be lost by change of command.

The use of a formal decision method also has its limitations. Dependence on a decision method may obstruct thinking 'outside the box'. The decision method may not be applicable in some situations if it is not dynamic enough. Adaptation of the decision method in the organization requires that it is appropriate for the organization and the context.

This article's outline is as follows. First the research methodology is presented. Based on several theoretical concepts the subsequent section develops an initial decision method for a military organization to prioritize humanitarian tasks. The content of the decision method, namely the inventory of the humanitarian tasks and of the attributes (used to evaluate the inventoried tasks), is then described in more detail. Next, the initial decision method is put to the test in a series of interviews. The results of the review are used to develop a new version of the decision method. The final section draws conclusions and presents an agenda for further research.

## RESEARCH METHODOLOGY

To address the problem the study started with an investigation of the current decision making and prioritization methods of military organizations in complex emergencies. It was observed that a commander often based his decisions on his own insights and experience and the advice of his staff officers. He did not use an explicit and structured decision method. This investigation established the requirements for a decision method in such circumstances.

Next, an extensive literature survey on decision theory was done. Based on this survey and the requirements, an initial decision method was developed. This method intends to support a military commander in his decisions and not to make the decisions itself.

The focus of the research is on the content of the decision method i.e. an inventory of potential humanitarian tasks and an inventory of attributes to ensure a sufficient input to the decision-making process. To inventory the potential humanitarian tasks, a literature review on development studies was done and a task inventory matrix was developed. This matrix classifies the potential humanitarian tasks according to two dimensions: (1) the categories of needs, and (2) the phases, which are distinguished in a complex emergency. Next, a list of attributes was derived from a stakeholder analysis based on a literature review on peace support operations and development studies. Attributes in this research are defined as inherent characteristics of the different humanitarian tasks, such as time, costs and number of beneficiaries.

The decision method, including the developed task inventory matrix and list of attributes, was then tested in 12 extensive expert interviews. The respondents were military staff with experience in peace support operations and humanitarian experts. A semi-structured questionnaire was used. The respondents were not shown the decision method before the interview, to avoid bias in their answers. At the end of every part of the interview, they were shown the respective part of the decision method and asked to comment on it. They were encouraged to provide examples of actual missions. Minutes of the interviews were sent to the respondents for correction. As the group of respondents was limited, the data were processed in a qualitative way. Based on examples from practice and opinions of the respondents, the initial decision method was adjusted, including a dynamic use of the decision method. Based on these results an agenda for further research was developed.

## REQUIREMENTS

Van den Brink<sup>8</sup> describes decision problems as either well-defined or ill-defined. In a well-defined decision problem, all consequences (e.g. outcome, costs) are known to the decision maker in advance. He or she is therefore able to calculate and select the most optimal course of action. The decision problems dealt with in a complex emergency are typically ill-defined. There is a lack of time and information and the outcome and costs of the alternative courses of action are highly uncertain. The high level of uncertainty follows from the lack of information and the fact that the decision of the decision maker is only one of many factors influencing the outcome and costs. Other complicating factors in a complex emergency are for example the response of the local population, the course of action of humanitarian organizations and the funds that are available on the long term.<sup>9</sup> In ill-defined decision problems, it is often not possible to determine one single optimal solution. Moreover, it is not possible to determine afterwards whether the selected solution was indeed the optimal one. Still, even in ill-defined decision problems, a structured

decision making process will enhance the quality of the decision and evaluation.<sup>10</sup>

The process of valuing and prioritization can be done in many different ways, ranging from mathematical models, combined with extensive sensitivity analyses, to simple presentation techniques. The selected decision method has to be suitable for use in evaluation and communication. Since a humanitarian task has both quantitative and qualitative attributes, the decision method should be applicable to both.<sup>11</sup> Given the limited time and information available to a military commander and his staff, the decision method should be easy to employ and produce a clear and easily accessible overview of the output. Such a decision method fits very well with other decision methodologies that are used in most military organizations. The complexity and uniqueness of each peace support operation and its context must be taken into account: the decision method has to be dynamic and easy to adapt to changing contexts. Finally, the decision method must be used to prioritize tasks. Most of the methodologies that are used in a decision-making process are meant to select one alternative from mutually exclusive alternatives. In this study, however, humanitarian tasks are prioritized and are not necessarily mutually exclusive, since more than one task may be executed or supported by the military.

#### INITIAL DECISION METHOD

The decision method most appropriate to the requirements is an extensive score card, i.e. a table providing an overview of the scores of the available tasks on each of the relevant attributes. To keep the decision-making process manageable, the number of tasks and attributes are reduced after an initial extensive overview. The first step of the decision method is an inventory of potential humanitarian tasks and an inventory of attributes. Next, a pre-selection of potential humanitarian tasks is made based on non-compensatory attributes. In case of a non-compensatory attribute, an inventoried task is always discarded if its score is insufficient, no matter what the score on all other attributes is. For example, if the budget of the decision maker is US\$5,000, and the costs of a certain humanitarian task are US\$10,000, this humanitarian task will be removed from the total set of inventoried tasks. This pre-selection reduces the number of inventoried tasks, thereby reducing decision complexity, while requiring a limited amount of information and time.

After the pre-selection, several humanitarian tasks remain, all of which score sufficiently on the non-compensatory attributes. These tasks will be analyzed more in-depth using the scorecard method. The scores on the attributes can be expressed both in quantitative and qualitative terms.

The coloring system of the general scorecard method is slightly adapted, since ranking many humanitarian tasks on each attribute will reduce the overview rather than enhance it. To optimize the overview the coloring system of the NATO CIMIC Reporting and Tracking System was selected.<sup>12</sup> Based on the performance on the compensatory attributes, the final decision is made by the military commander and his staff. The selected decision method is described in Table 1 and visualized in Figure 1.

In Figure 1 one can see that the number of humanitarian tasks is reduced twice: first, in step 4, using non-compensatory attributes and secondly, in step 6, using compensatory attributes. The advantages of the selected method are:

- the pre-selection of inventoried humanitarian tasks reduces amount of time and information required;
- both quantitative and qualitative attributes can be used, without loss of information due to standardization;
- the method is easy to apply;
- a structured overview of the information enhances explicit decision making, communication of the decision and evaluation;
- counterparts in negotiations are less likely to be offended by the presentation technique.

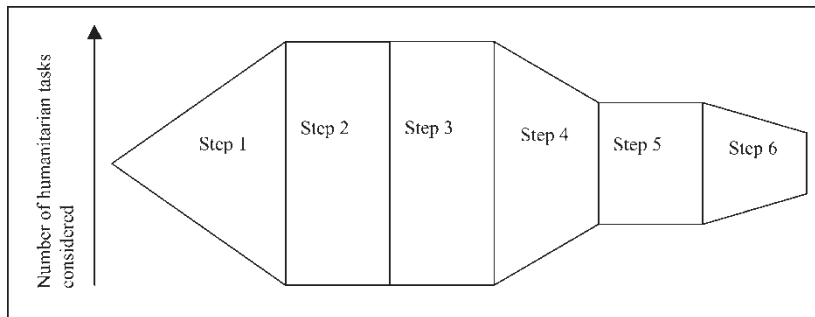
The scores on the different attributes are not standardized. Furthermore, no weighing factors are given: the final decision is up to the commander and his staff. This involves the risk of unclear decision making. It is therefore important that the commander and staff explicitly take the final decision, using the scorecard for communication and reference.

The method discussed above is fully in line with the general opinion of both humanitarian and military actors i.e. that the basis of an inventory must be a *needs-driven approach*.<sup>13</sup> In such an approach the needs of the host nation and humanitarian actors should be assessed first, before project plans are set up.<sup>14</sup> In the next sections a matrix is developed to inventory potential humanitarian tasks. The matrix consists of two dimensions. The first dimension is formed by the needs, grouped into several categories. The second

TABLE 1  
THE SELECTED METHOD FOR PRIORITIZATION

Step 1	Inventory potential humanitarian tasks
Step 2	Inventory attributes
Step 3	Determine non-compensatory attributes, including performance
Step 4	Pre-select inventoried tasks based on non-compensatory attributes
Step 5	Determine performance on compensatory attributes
Step 6	Prioritize inventoried tasks based on compensatory attributes

FIGURE 1  
NUMBER OF HUMANITARIAN TASKS CONSIDERED DURING DECISION MAKING  
PROCESS



dimension consists of the phases, which are distinguished in a complex emergency. This is important since a complex emergency evolves through different phases and in each phase important aspects such as ‘spectrum of violence’, ‘presence of military–humanitarian actors’, but also ‘needs of the host nation’ change.<sup>15</sup> Finally, the matrix is presented in both dimensions, and each cell is defined.

#### CATEGORIES OF NEEDS

A ‘need’ in the context of a complex emergency is defined as: *a shortcoming in the coping capacity of a host nation to manage the negative impact of a complex emergency.*<sup>16</sup> This definition is narrowly related to the concept of a complex emergency. In a complex emergency a host nation is not able to deal with elements such as safety, food shortage, economic collapse, and a shortage of public and private services. External support has to be provided by the international community to support the host nation in coping with the disaster. Before describing the different categories of needs, the terms ‘host nation’ and ‘local coping capacity’ will be described more in detail.

In general, a host nation consists of the armed forces, government and local population, including internally displaced persons (IDPs) and militia. Frerks and Hilhorst<sup>17</sup> stress the importance of not thinking in terms of victims when dealing with the affected population. It is better to view affected people as *social actors* with distinct *coping capacity*. Households develop a large range of coping practices in response to disasters. Social networks in society contribute to this coping capacity. Social networks influence humanitarian aid in two ways: first, not all needs have to be provided by relief organizations, because social networks help people to survive. Secondly, social networks

cause a distribution of vulnerability in a differentiated manner: networks may be employed to manipulate relief at the expense of other people in need who lack the necessary contacts.

According to Frerks and Hilhorst<sup>18</sup> and Sphere Project,<sup>19</sup> a host nation should not be regarded as a black box, but as a complex (often unknown) set of social and political networks, which influence the needs assessment. Thus, responding to a complex emergency is not just fulfilling the needs, but requires knowledge of the local social network. A social network provides knowledge about current local coping capacity and possible unequal vulnerability. The needs of the host nation are grouped in order to provide 'categories of needs' from which humanitarian tasks can be derived. The Sphere Project<sup>20</sup> is an initiative of humanitarian organizations (e.g. OXFAM) to develop a set of universal minimum standards in core areas of humanitarian assistance. The project distinguishes five areas in which help can be provided. These are: *water supply and sanitation, nutrition, food aid, shelter and health services*. CSIS & AUSA<sup>21</sup> provide additional categories of needs: *safety, infrastructure, economy, governance, civil society, education and justice*.

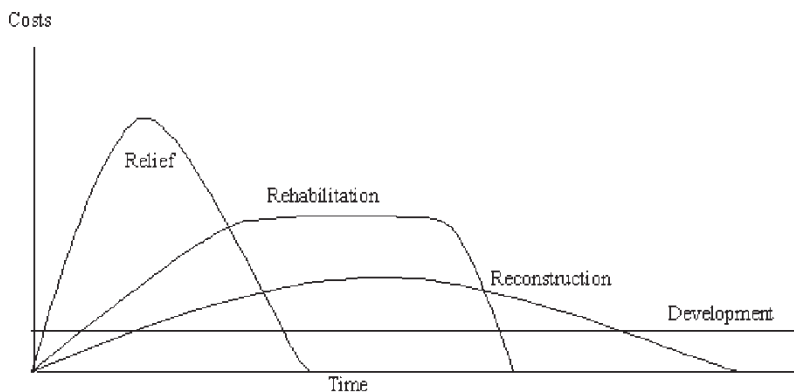
#### PHASES IN A COMPLEX EMERGENCY

Most theories regard a complex emergency as a dynamic process. Mitchell<sup>22</sup> designed the conflict life cycle, in which 11 possible phases of a conflict are well-defined (emergence, confrontation, escalation, contention, impasse, de-escalation, pre-negotiation, negotiation, implementation, consolidation and resolution). According to Mitchell, each conflict passes through different stages in a non-linear way. The studies of Glasl<sup>23</sup> and Fisher<sup>24</sup> are similar to the study of Mitchell. These authors have a 'multi' stage approach in common, in which the duration of the different stages is derived from the duration of the different conflict solving tasks by a third party. In other words, the transition between different phases in a complex emergency is defined by how a third party intervenes (in a conflict solving way) in a complex emergency.

In most recent literature, only three or four types of post-conflict phase are distinguished. The most common phases defined are relief, rehabilitation, reconstruction and development.<sup>25</sup> Kirkby et al. present 'the real and ideal disaster recovery cycle' in which each phase is described in terms of spent costs and time. Figure 2 shows the real disaster cycle, an explanation of a disaster in terms of cost and time. This real recovery cycle is not ideal for several reasons. First of all, a lack of disaster preparedness causes a slow response to a disaster. Second, a situation of aid dependency of the local population is created since relief aid is provided beyond the phase of acute emergency. Third, in most of the cases of their study all efforts (relief, rehabilitation, reconstruction and development work) start simultaneously at



FIGURE 2  
THE REAL DISASTER RECOVERY CYCLE



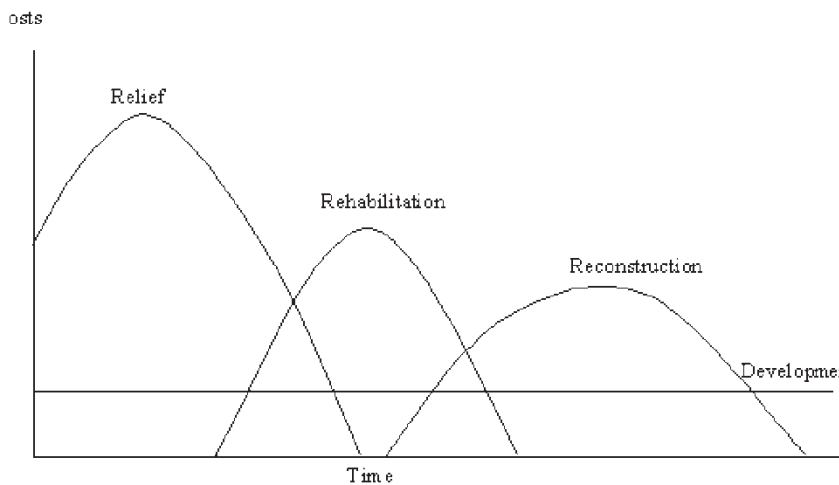
Source: S.J. Kirkby, P. O'Keefe, G. Frerks, T. Kliest and I. Convery, 'A Disaster Continuum?'. *Disaster. The Journal of Disaster Studies and Management*, Vol. 19, No. 4 (1996), pp. 362-7.

the start of the humanitarian aid provision. This requires a large amount of money in the starting phase of humanitarian assistance. It also creates consequent enhancement of dependency, making it difficult to enter the development phase. Finally, since the four stages exist simultaneously during a period of time, a surplus of resources is deployed at this moment. Besides aid dependency, another consequence is that development actors are competing for relief, and relief agencies are doing development. So different parties are claiming the same funds.<sup>26</sup>

In an ideal recovery process the different phases are still conflated, but start in a different period. Furthermore, the money spent in each phase should be declining in time. Figure 3 shows the ideal disaster recovery cycle.

In the present study three of these phases are used. The reason to use these phases is that they are characterized and distinguished by different types of humanitarian tasks. In the first phase (i.e. relief) both military and humanitarian organizations start to execute humanitarian tasks that are intended to meet basic needs. The relief phase starts when the first humanitarian tasks are executed by the military organization. This may even be in the first stages of a conflict (escalation or even tension).<sup>27</sup> In the rehabilitation phase, relief assistance programs are transformed into activities to stabilize the economic and social situation towards a medium- and long-term development strategy. The reconstruction phase is outside the scope of this research, since the aim of this phase is a complete resumption of the pre-disaster state.<sup>28</sup> In some cases (e.g. natural disaster) reconstruction of society is needed, but in the case of a complex emergency, it is often not desirable to

FIGURE 3  
THE IDEAL DISASTER RECOVERY CYCLE



Source: S.J. Kirkby, P. O'Keefe, G. Frerks, T. Kliet and I. Convery, 'A Disaster Continuum? Disaster. *The Journal of Disaster Studies and Management*, Vol. 19, No. 4 (1996), pp. 362-7.

return to the society as it was before the conflict. The scope of this study ends when military organizations leave the area of the complex emergency. This may happen after the rehabilitation phase, or even in the phase of development.<sup>29</sup> The following definitions are used in this research.<sup>30</sup>

- *Relief*: Assistance and/or intervention during or after conflict to meet the life preservation and basic subsistence needs in order to alleviate suffering.
- *Rehabilitation*: The operations and decisions taken after a phase of relief with a view to stabilize a stricken community in its economic, social, infrastructural and bureaucratic conditions.
- *Development*: Actions taken to consolidate rehabilitation efforts in such a way, that the society will be self-sustaining. It is this phase that also lays the foundation for the prevention of conflict and re-emergence of violence.

#### HUMANITARIAN TASK INVENTORY MATRIX

Based on the definition of the phases of a complex emergency and the definition of need categories, a humanitarian task inventory matrix is developed. Each cell presents what humanitarian tasks military forces can support in each phase of a complex emergency, categorized by need. The task inventory matrix describes every task in abstract terms. This is due to

the unique characteristics of each complex emergency: it is impossible to inventory every task in detail preceding a complex emergency.<sup>31</sup> The matrix does not conclude to what extent the task must be executed: it depends on the situation whether the term *support* must be interpreted as ‘complete planning, organization and implementation of a task’ or as ‘contributing to a part of the task (for instance in co-operation with a humanitarian organization)’. The decision maker who uses the matrix has to transform the general tasks into situation-specific potential tasks. For example: the task ‘to support the provision of essential health service’ can, according to the situation, be translated in ‘providing medical assistance in refugee camp X’ or ‘constructing provisional hospitals for NGO Y’. Due to its size Table 2 shows only a part of the humanitarian task inventory matrix (i.e. two needs categories instead of all 12).

INVENTORY OF ATTRIBUTES

With the completion of the humanitarian task inventory matrix, step 1 of the decision method is complete. According to Goodwin and Wright,<sup>32</sup> attributes must be used to judge the inventoried humanitarian tasks, which is the second

TABLE 2  
A SECTION OF THE HUMANITARIAN TASK INVENTORY MATRIX

Needs category	Phase Relief	Rehabilitation	Development
Safety	Protection of vulnerable population (refugee flows, ethnic minorities)	(Re-)establishment of police force	Capacity building of public security (i.e. training local police capacity)
	Mine clearance in key areas	Support of demining programs	Capacity building of armed forces
	Protection of humanitarian aid workers	(Re-)establishment of armed forces	
Shelter	Construction and support of refugee/IDP camps	Support of repatriation programs	Capacity building of construction sector (developing construction standards, providing training to constructors)
		Rehabilitation of existing houses Construction of affordable housing	

Sources: CSIS & AUSA; Sphere Project; Cimic Group North (CGN), Tactical CIMIC Course 01/03 (Course provided by the Cimic Group North of NATO in January 2003. Budel: Cimic Group North, 2003).

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step of the decision method. Attributes are inherent characteristics of a certain course of action.<sup>33</sup> Attributes in this study describe characteristics of the different humanitarian tasks and can be evaluated in a quantitative or qualitative way. For example: 'The costs of Task X are US\$10.000' (quantitative), or: 'Task Y is carried out in Serb and Muslim villages' (qualitative).

The list of attributes is derived from a stakeholder analysis.<sup>34</sup> The subsections below describe the main groups of stakeholders and their attributes.

#### *Military Force*

Attributes derived from the military force concern primarily the capacity of the force. The policy of most national governments is to use a limited timeframe for humanitarian tasks performed by the military.<sup>35</sup> Often the department of foreign affairs provides the military with a budget for performing humanitarian tasks in each rotation of a peace support operation.<sup>36</sup> Apart from the initial costs, the maintenance costs have to be taken into account. In order to transfer the activity, future payment of maintenance by either donor organizations or the beneficiaries themselves has to be ensured. Besides time and costs, other resources have to be available to perform the task: staff and sometimes machines and materials, but also expertise. The capacity of the military force to provide these resources is limited.

Besides the attributes relating to military capacity, several additional attributes can be identified, varying from the legal boundaries to the visibility of the humanitarian tasks<sup>37</sup> and the effect on the security of the own troops and of the region. These effects have to be estimated beforehand.

#### *Host Nation*

The population of a host nation is a complex set of social networks.<sup>38</sup> As discussed earlier, a social network provides knowledge about current local coping capacity and possible inequality and vulnerability. Humanitarian tasks should be focused on enhancing local coping capacity.<sup>39</sup> Therefore the (related) elements of local coping capacity such as capacity building, participation, local administration /authorities and aid dependency are used to derive attributes. If the most vulnerable groups do not benefit from the humanitarian tasks, it may create an even higher rate of relative poverty, leaving those who are most vulnerable even worse off than they were before the start of the aid provision. The effect of the humanitarian tasks on vulnerable groups is therefore to be taken into account.

In many complex emergencies ethnic tensions and violence have been widespread. Humanitarian tasks may create more tension by benefiting only one ethnic group. They may also be deliberately focused on one (vulnerable)

ethnic group. The effect of ethnic groups should always be considered, since it may enhance or endanger the security of the region. Dealing with people from different geographical regions, and different cultural and religious background requires a certain degree of cultural and religious awareness.

### *Humanitarian Organizations*

Humanitarian organizations are responsible for a wide range of activities encompassing humanitarian aid, human rights, protection of minorities, refugees and displaced persons, legal assistance, medical care, reconstruction, agriculture, education, art, sciences and general project funding.<sup>40</sup> The humanitarian sector, and especially the NGO sector, is extremely diverse and includes thousands of different organizations – differentiated by size, maturity, expertise, quality and mission – which makes it difficult to generalize about them.<sup>41</sup>

Humanitarian organizations often exceed the military in expertise on humanitarian tasks.<sup>42</sup> Also, they may be good counterparts for the military force. Transferring the task to one of these organizations secures a clear exit strategy for the military. The presence and capacity of IOs and NGOs and their capacity to carry out or participate in the humanitarian task should be considered by the military.

Due to its size Table 3 shows a part of the list of identified attributes.

### *Next Steps*

The list of attributes completes the second step of the decision method. The next steps in the decision method are to be made explicitly by the commander

TABLE 3  
A SECTION OF THE LIST OF ATTRIBUTES

Actor	Attributes relevant to military commander
Military	Estimated project costs Visibility Effect on safety of troops
Host Nation	Capacity of local actors to perform the task Extent to which local materials are used Ethnicity benefited
Humanitarian organizations	Availability of organizations capable and willing to perform the task Extent to which humanitarian organizations are hindered Availability of organizations to which the tasks and responsibilities can be transferred to

Source: R. Damen and M.S.F. Ollislagers, *Development of a Decision Framework for the Dutch Military to Inventory and Prioritize Humanitarian Tasks in a Complex Emergency* (Enschede: University of Twente, 2004).

and his staff. First, he should determine which attributes he considers non-compensatory and determine the performance of the potential humanitarian tasks on these attributes (step 3). Based on these performances the commander is able to make a pre-selection of the inventoried tasks (step 4). Next, he should determine the performance of the pre-selected tasks on the compensatory attributes (step 5) and based on these outcomes he is able to make a final prioritization of the humanitarian tasks (step 6). As step 3–6 of the decision method consist of decisions only and do not require any additional input, they are not elaborated here.

#### EMPIRICAL REVIEW

In the second stage of the research, the decision method, including the task inventory matrix and the list of attributes, was reviewed by way of expert interviews. The objective of the interviews was to improve the method, using the knowledge and experience of experts in the fields of military operations, humanitarian work and development science. Twelve respondents were selected from military (7 respondents), humanitarian (2 respondents) and scientific (3 respondents) organizations on the basis of their experience with peace support operations or with humanitarian activities.

In order to meet the objective of the interviews, three main questions were formulated, from which the actual interview questions were derived:

- What improvements can be made to the decision method?
- What improvements can be made to the inventory of humanitarian tasks, bearing in mind the complexity of the context?
- What improvements can be made to the list of attributes for compensatory and non-compensatory selection?

The subsections below discuss the issues raised concerning each of these questions.

#### *Decision Method*

All respondents, except two, considered the prioritization method to be appropriate. It was noted that the decision method is more applicable to the dynamic context of a peace support operation than a multi-attribute utility model would be, since the latter uses weighing factors. The developed decision method gives a clear insight in the final decision, which helps evaluation. Some respondents added that the decision method will be very useful in the circumstances characterizing decision making in a complex emergency, namely under pressure and in tiring and demanding conditions. They believe that the explicit description of the ‘points of concern’ is indeed

very necessary since it makes the difference between 'doing good' and 'doing things well'. It is possible to apply expertise from different specialists and this information can be processed in the decision method. Many respondents considered the decision method to be suitable for the military organization since it closely resembles its current way of decision making.

One respondent was afraid that the selection method requires too much expertise from military personnel. He argued that one should be aware that despite formal rules, individuals tend to decide in different ways. For example in banking, despite all formal indicators such as liquidity and solvability, different bankers decide differently about financing companies. It was added that the prioritization method should not be considered as decisive but rather as guiding. Moreover, it was suggested that the terminology used in the matrix should be clear to anyone working in the setting of a complex emergency. If too much military terminology is used in the method, it will be hard to use it as a technique for communication and negotiation.

It was suggested to link the decision method to the checklists that are being used on tactical/technical level. These checklists elaborate on aspects such as technical feasibility. Examples of aspects on such checklists are: 'is the water source a lake or river?' and 'what is the direction of the current?' (in case of water supply). Given the circumstances of a complex emergency, it is better to put the decision method on a small instruction card rather than developing a digital version. The decision method is well applicable for other organizations that work in complex emergencies, after small adaptations.

Monitoring of ongoing tasks is not covered by the decision method. The prioritization is well described, but there is no method to determine if the 'line of operation' is being followed during implementation. Respondents suggested the following possible indicators for such a monitor: statistics of World Health Organization, willingness of population to speak openly and media attention. The British military forces use so-called 'normality indicators' for monitoring whether an area is developing towards a more secure and safe environment (e.g. number of crimes committed, intensity and kind of traffic and number of people on the streets). To ensure proper monitoring of the effects, these indicators should be measured before, during and after the implementation.

#### *Inventory of Humanitarian Tasks*

Respondents indicated that an inventory of tasks should consist of roughly two phases. The first phase would be an inventory prior to the mission. The second phase takes place in-field. The importance to update the inventory regularly is also stressed, since the needs of the population change over time, even within the phases. It was suggested that, during combat, the operations planning should already consider possible humanitarian tasks (e.g. it might be decided

to bomb a local electricity hub rather than a central power plant, during the conflict, in order to ensure a quick restart of the electricity network after the conflict).

The in-field information flow consists of information derived from the reconnaissance troops, own observations, liaison with local population, humanitarian organizations and local authorities. Based on this the information gained in the first phase should be adapted. The intelligence section of the force can be employed to update this information, using feedback from the operations section. But the information from humanitarian organizations is vital as well. It was emphasized that if humanitarian organizations are not consulted, it may happen that military organizations and NGOs compete for the same projects, resources and/or beneficiaries. For example the Dutch military engineers built a hospital in Turbe, Bosnia–Herzegovina. Only after completion, it turned out that the hospital had been financed by three NGOs. Each NGO had paid for the entire hospital, without being aware of the other NGOs financing it.

Many of the respondents mentioned that most of the problems that arise in practice during inventory of tasks deal with the reliability of information and its sources. Local authorities sometimes provide information that is aimed at benefiting their own identity groups. It is often policy of a military organization to support these local authorities, because they constitute organizational capacity needed to fill the institutional gap. The Serb mayor of Jaise (Northern Bosnia–Herzegovina) used his influence to benefit his party members during food distribution by the Dutch military. He was able to do this, since he was the source of information for the Dutch when planning the distribution.

It was not clear to several respondents that the tasks in the matrix were abstract tasks, which can be supported by the military force. Some commented on the extent to which the abstract tasks must be transformed into physical projects. They argued that the objective of a humanitarian task should be formulated on a functional rather than a physical level. The purpose of building a school is not to create the physical object ‘school’, but to create the function ‘school’, including a suitable (both technical and socio-geographical) location, building, teachers, books and a management system. The following example illustrates this: ‘In Bosnia–Herzegovina, an abattoir was built. The problem was, however, that there were no livestock farms near it.’

#### *Attributes*

The content of the attributes was discussed intensively during the interviews. None of the respondents mentioned all of the attributes concerning development issues used in the initial framework, but agreed that they were all useful. According to one respondent the list of attributes is too large, since



it encompasses too many attributes that are outside the expertise of the military. Although this respondent is right in noting that the military lack expertise on some attributes in the list, this is not an argument to limit the attributes list to attributes that fall within their expertise. Rather, training in the basic principles of development issues should be given in order to provide additional insight in the importance and use of these attributes.

Since it is too detailed to include all the results in this article, several attributes are illustrated by examples. A respondent, who was a civic officer in ISAF, stressed the importance of the attribute *estimated maintenance costs*. He stated that the Spanish military in Kabul built a school, of which the roof collapsed. However, they lacked the budget to do the necessary repairs, resulting in a school without a roof. If a local contractor had built the school, he had been responsible for delivering a proper school building and would have had to repair the roof. Concerning the attribute *extent to which local materials are used* this same respondent answered: 'Old school furniture of a Dutch school was flown to Kabul to supply Afghan schools. The costs of transport totaled €400,000. The furniture could have been produced locally for a tenth of these costs'.

The attribute *number of beneficiaries on short term or long term* was illustrated by several officers, which had served during SFIR. They stated 'In Al-Muthanna, Iraq, the local population was becoming angry since they had no proper electricity and water supply. They were complaining that it took Saddam Hussein only a few weeks to restore electricity and water after the first Gulf War, while it took SFIR more than five months'.

Relating to the attribute *legality*, a military respondent argued: 'A Finnish battalion built an orphanage in Kabul. Shortly after completion, the legitimate owner of the soil claimed it to be his property. He then used the orphanage as a house'.

Finally, concerning the attribute *the extent to which local media-visibility creates more support by the local population*, respondents answered: 'The Dutch commander in Iraq made a weekly appearance on local television. He showed projects of the Dutch military. It appeared that a visual presentation had more impact than speeches'.

## RESULTS

Based on the expert interviews both the task inventory matrix and the list of attributes were slightly revised. The full task inventory matrix is presented in Table 4 and the full list of attributes in Table 5.

In using the decision method one has to deal with its limitations:

1. The decision method does not replace the common sense of the user. It is not a recipe, but a guideline;

TABLE 4  
REVISED TASK INVENTORY MATRIX

Needs category	Phase Relief	Rehabilitation	Development
Civil society	<ul style="list-style-type: none"> <li>To facilitate contact between religious leaders</li> <li>Provisional community meeting places</li> </ul>	<ul style="list-style-type: none"> <li>(Re-)establishment of sport facilities</li> <li>(Re-)establishment of community facilities</li> <li>(Re-)establishment of cultural sites</li> </ul>	<ul style="list-style-type: none"> <li>Capacity building for non-governmental organizations</li> </ul>
Economy	<ul style="list-style-type: none"> <li>(Re-)establishment of critical factories/business activities</li> <li>To set networks between business partners</li> <li>Protection of money flows</li> </ul>	<ul style="list-style-type: none"> <li>Protection of money flows</li> <li>(Re-)establishment of markets</li> <li>(Re-)establishment of financial systems</li> </ul>	<ul style="list-style-type: none"> <li>Protection of money flows</li> <li>Micro credit programs</li> </ul>
Education	<ul style="list-style-type: none"> <li>Mine awareness courses</li> <li>Hygiene education</li> <li>Escort of schoolchildren</li> </ul>	<ul style="list-style-type: none"> <li>(Re-)building of schools and universities</li> <li>Training of teachers</li> </ul>	<ul style="list-style-type: none"> <li>Establishment of a public school system</li> </ul>
Energy	<ul style="list-style-type: none"> <li>Provision of fuel</li> <li>Provision of electricity in key areas</li> </ul>	<ul style="list-style-type: none"> <li>Managing energy infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Capacity building in energy sector</li> </ul>
Food/Nutrition	<ul style="list-style-type: none"> <li>Distribution of food</li> </ul>	<ul style="list-style-type: none"> <li>(Re-)establishment of food production/distribution-networks/markets</li> </ul>	<ul style="list-style-type: none"> <li>Set up food/agricultural programs</li> </ul>
Governance	<ul style="list-style-type: none"> <li>Providing local authorities with basic needs</li> </ul>	<ul style="list-style-type: none"> <li>(Re-)establishment of elements of governmental organizations</li> </ul>	<ul style="list-style-type: none"> <li>Organization of electoral process</li> </ul>
Health/Hygiene	<ul style="list-style-type: none"> <li>Providing essential health service</li> <li>Set up hygiene promotion programs</li> <li>Providing mortuaries and/or burial place</li> </ul>	<ul style="list-style-type: none"> <li>Rehabilitation and expanding of existing medical services</li> </ul>	<ul style="list-style-type: none"> <li>Capacity building of public health sector</li> </ul>
Infrastructure	<ul style="list-style-type: none"> <li>Provision of key infrastructure (e.g. telecommunications, roads)</li> </ul>	<ul style="list-style-type: none"> <li>Managing infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Set up maintenance programs for existing infrastructure</li> </ul>
Justice	<ul style="list-style-type: none"> <li>Managing justice system</li> </ul>	<ul style="list-style-type: none"> <li>Managing justice system</li> </ul>	<ul style="list-style-type: none"> <li>Establish. war tribunals, truth commission</li> </ul>

TABLE 4 – CONTINUED

Needs category	Phase Relief	Rehabilitation	Development
Safety	<ul style="list-style-type: none"> <li>• -Enforcement of the law</li> <li>• Protection of vulnerable population</li> </ul>	<ul style="list-style-type: none"> <li>• -Enforcement of the law</li> <li>• (Re-)establishment of police force</li> </ul>	<ul style="list-style-type: none"> <li>• Capacity building of public security sector (e.g. training local police capacity)</li> </ul>
	<ul style="list-style-type: none"> <li>• Disarming of former belligerents</li> </ul>	<ul style="list-style-type: none"> <li>• Supporting de-mining programs</li> </ul>	<ul style="list-style-type: none"> <li>• Capacity building of armed forces</li> </ul>
	<ul style="list-style-type: none"> <li>• Mine clearance in key areas</li> <li>• Protection of humanitarian activity</li> </ul>	<ul style="list-style-type: none"> <li>• (Re-)establishment of armed forces</li> </ul>	
	<ul style="list-style-type: none"> <li>• Supply of blankets and tents</li> </ul>	<ul style="list-style-type: none"> <li>• Rehabilitation of existing houses</li> </ul>	<ul style="list-style-type: none"> <li>• Capacity building of construction sector (e.g. developing construction standards, providing training to constructors)</li> </ul>
Shelter	<ul style="list-style-type: none"> <li>• Construction and support of refuge/IDP camps</li> </ul>	<ul style="list-style-type: none"> <li>• Registering of legitimate house owner</li> <li>• Construction suitable housing</li> </ul>	<ul style="list-style-type: none"> <li>• Supporting repatriation programs</li> </ul>
	<ul style="list-style-type: none"> <li>• Supply of clean water (separate from waste)</li> <li>• (Interim) sanitation and disposal of solid waste</li> </ul>	<ul style="list-style-type: none"> <li>• (Re-)construction water network</li> <li>• (Re-)construction waste removal flow</li> </ul>	<ul style="list-style-type: none"> <li>• Set up water management programs</li> <li>• Set up waste management programs</li> </ul>
Water/Sanitation			

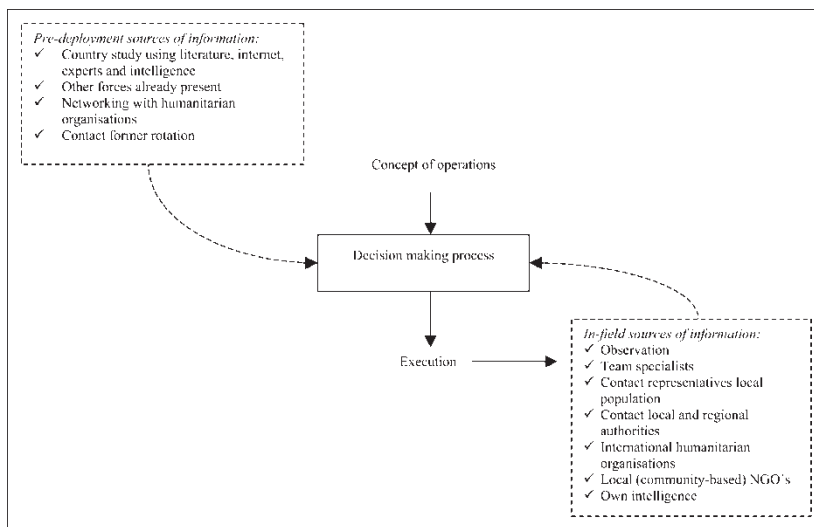
2. the decision method is a model in the sense that it is always a simplification;
3. the quality of decisions made using the decision method strongly depends on the reliability of information;
4. although the inventory matrix distinguishes three phases in a complex emergency, one has to be aware that within these phases the needs and attributes may change as well.

To address the third and fourth limitation, the dynamics of a complex emergency require an inventory to be regularly checked and updated. This differs from the initial task inventory matrix and the list of attributes, intended as input to the prioritization process. To improve the reliability of gathered information as many sources as possible need to be consulted (i.e. data triangulation), rather than disqualify information that is gathered from a suspicious source. A larger number of sources enhances the possibility to assemble valid information. Figure 4 presents how the decision method

TABLE 5  
REVISED LIST OF ATTRIBUTES

Actor	Attributes relevant to military commander
Military	<p>Estimated project time</p> <p>Estimated project costs</p> <p>Estimated maintenance costs</p> <p>Ability and willingness to finance maintenance costs of project beneficiaries</p> <p>Ability to perform the project within the capacity of the own organization</p> <p>Morale of the troops</p> <p>The extent to which the mission is supported</p> <p>Satisfaction of immediate needs</p> <p>Risk of extending the economy of violence</p> <p>Number of beneficiaries (short term/long term)</p> <p>Vulnerable groups harmed or benefited</p> <p>The possibility to execute the task within all the legal boundaries</p> <p>The effect on the safety of the own troops</p> <p>The effect on the safety of the population</p> <p>The extent to which visibility creates more support by the local population</p> <p>Technical feasibility</p> <p>International standards</p> <p>Level of technology used</p> <p>Extent to which the project fits the pre-conflict living conditions</p>
Host Nation	<p>Capacity of local actors to perform the task (instead of international aid providers)</p> <p>The extent to which local capacity is strengthened (instead of providing the service)</p> <p>Participation of local actors</p> <p>The extent to which authority and responsibility of the local authority are harmed or improved</p> <p>Possibility to use an employment-based approach</p> <p>Use of local business activity</p> <p>The extent to which local materials are used (instead of imported)</p> <p>Effect on local price mechanisms</p> <p>Availability of a proper follow up strategy</p> <p>Use of local administrative structures</p> <p>Transfer of knowledge</p> <p>Identity groups benefited</p> <p>Identity groups who participate in the project</p> <p>The extent to which the task fits the local religious and cultural background</p>
Humanitarian organizations	<p>Availability of organizations capable and willing to perform the task</p> <p>The extent to which other organizations are harmed or hampered</p> <p>Availability of organizations capable and willing to co-operate</p>

FIGURE 4  
DYNAMIC USE OF THE INVENTORY MATRIX AND LIST OF ATTRIBUTES



should be used in a dynamic way, including its sources of information. Its input is the military concept of operations, in which the lines of operations, centers of gravity and end states are included. Based on this the military commander or his staff initiate the decision making process. The actual execution of a humanitarian task will eventually influence the in-field sources of information, which in turn influence the decision making process.

## CONCLUSION

The decision method presented above is considered to be appropriate. Based on development literature it enables a complete inventory of humanitarian tasks at tactical level in both humanitarian and peace support operations. Next, it gives a detailed overview of the relevant attributes to judge the humanitarian tasks. The actual prioritization and final decisions are to be made by the commander and his staff.

The method suits the formal way of decision making in a military organization. Based on the empirical review there is sufficient reason to conclude that the decision-making process will be improved by the developed decision method, compared to the decision making process currently used in practice.

However, in order to improve the decision method, several adaptations must be made. These adaptations are to be seen as an agenda for further research:

- The decision method must be tested in practice and adjusted accordingly;
- training for future users needs to be developed on both the use of the decision method and development issues;
- the decision method needs to be expanded with a monitoring and evaluation tool.

#### NOTES

1. Andrew S. Natsios, 'Commander's Guidance: A Challenge of Complex Humanitarian Emergencies', *Parameters*, No. 2 (1996), 50–66.
2. The 'military' is not a single, homogeneous body. Navies, air forces, armies and marines all have their own traditions and ethical standards, not to mention the differences between the armed forces of different states.
3. Note that several humanitarian organizations believe that the word 'humanitarian' can solely be used to a neutral and impartial delivery of assistance and therefore strict humanitarian tasks cannot be provided by military forces.
4. NATO, *NATO Civil–Military Cooperation (civic) Doctrine*, AJP-9, 2001.
5. Hugo Slim, 'The Stretcher and the Drum: Civil–Military Relations in Peace Support Operations', *International Peacekeeping*, Vol. 3, No. 2 (1996), 123–40.
6. A.B. Siegel, 'Mission Creep: An Autopsy of a Hopefully Dying Term', *Low Intensity Conflict & Law Enforcement*, Vol. 8, No. 1 (1999), 119–38.
7. R.L. Keeney and H. Raffia, *Decisions with Multiple Objectives: Preferences and Trade-offs* (New York: John Wiley & Sons, 1976); Jasmin Enayati, 'The Research: Effective Communication and Decision Making in Groups', in Minu Hemmati, et al., *Multi-Stakeholder Processes for Governance and Sustainability – Beyond Deadlock and Conflict* (London: Earthscan, 2001), (<http://www.earthsummit2002.org/msp/chap5.htm>), (25 September 2003).
8. W.P. Van de Brink, 'Beslissingsmodellen', in P. Koele and J. van der Pligt (eds), *Beslissen en beoordelen* (Amsterdam: Boom, 1993). In Dutch.
9. *Vredesoperaties* (Den Haag: Koninklijke Nederlandse Landmacht, 1999).
10. Keeney and Raffia.
11. R. Damen and M.S.F. Olislagers, *Development of a Decision Framework for the Dutch Military to Inventory and Prioritize Humanitarian Tasks in a Complex Emergency* (Enschede: University of Twente, 2004).
12. The ARRC system is used by NATO to make a rapid assessment of the situation in a complex emergency in four areas, i.e. infrastructure, life support, humanitarian support and civil administration. The reporting is done using colors: green is used for a positive effect, yellow for neutral effect, red for negative effect and white for unknown effect. Allied Rapid Reaction Corps (ARRC) *Civic Reporting and Tracking System*, NATO Unclassified, 2003.
13. John Rollins, *Operational Models for Civil–Military Cooperation: Possibilities and Limitations* (London: Overseas Development Institute, 2001).
14. Contrary to the needs-driven approach, a supply-driven approach could be applied. In such an approach, aid is delivered based on available capacity, rather than based on inventoried needs.
15. S.J. Kirkby, P. O'Keefe, G. Frerks, T. Kliet and I. Convery, 'A Disaster Continuum?', *Disasters. The Journal of Disaster Studies and Management*, Vol. 19, No. 4 (1996), 362–367.
16. Myriame Bollen, *Working apart together: civiel–militaire samenwerking tijdens humanitaire operaties*. (Wageningen: Wageningen University, Disaster Studies, 2002). In Dutch.

17. Georg Frerks and Dorothea Hilhorst, *Local Capacities for Peace: Concepts, Possibilities and Constraints*. (Wageningen: Wageningen University, Disaster Studies, 1999).
18. Ibid.
19. Sphere Project, *Humanitarian Charter and Minimum Standards in Disaster Response* (Geneva: Oxfam Publishing, 2000).
20. Ibid.
21. Center for Strategic and International Studies and the Association of the United States Army (CSIS & AUSA), *Post Conflict Reconstruction Framework* (Washington: CSIS, 2002).
22. Christopher R. Mitchell, 'Problem-solving Exercises and Theories of Conflict Resolution', in Dennis J.D. Sandole and H. van der Merwe (eds), *Conflict Resolution Theory and Practice* (Manchester and New York: Manchester University Press, 1993), pp. 78–94.
23. Friedrich Glasl, 'The Process of Conflict Escalation and Roles of Third Parties', in David M. Last, *Theory, Doctrine and Practice of Conflict De-escalation in Peacekeeping Operations* (Toronto: Canadian Peacekeeping Press, 1997), pp. 14–29.
24. Ronald Fisher, 'The Potential for Peace Building: Forging a Bridge from Peacekeeping to Peacemaking', in David M. Last, *Theory, Doctrine and Practice of Conflict De-escalation in Peacekeeping Operations* (Toronto: Canadian Peacekeeping Press, 1997), pp. 14–29.
25. Kirkby et al.
26. For instance: the Dutch government is funding the Dutch military, who are present in Iraq to fulfill humanitarian tasks, but also the NGOs who work in the same field of humanitarian assistance. Tensions arise (especially from point of view from the NGOs) because both types of organizations share the same budget.
27. In the Iraq war of 2003 the building of refugee camps started in a period of extreme political tension, just before the war broke out.
28. Steenaert en de Klerk, *Optimalisatie van noodhulp, een inventariserende studie* (Wageningen: Wageningen University, Disaster Studies, 1994).
29. A lot of discussion nowadays deals with the question of military presence in the development phase. It is outside the scope of this research to judge whether a military organization should assist in the phase of development or not. In practice military organizations are deployed in the development phase for political reasons (e.g. Bosnia–Herzegovina), so the development phase will be taken into account in this research.
30. Kirkby et al.; CSIS & AUSA; Wageningen Disaster Studies (WDS), *Linking Relief, Rehabilitation and Development (RRD)* (Wageningen: Wageningen University, Disaster Studies, 1995), unpublished (Ref K159).
31. WDS.
32. Paul Goodwin and George Wright, *Decision Analysis for Management Judgment* (New York: John Wiley & Sons, 1998).
33. Merriam-Webster, *Online Dictionary*, (<http://www.m-w.com/cgi-bin/dictionary>), 24 September 2003.
34. Damen and Olislagers.
35. Kamp De Hoop Scheffer and Van Ardenne, *Kamerbrief 19 mei 2003: Beleidskader civiel-militaire samenwerking* (Den Haag: Dutch Ministries of Foreign Affairs and Defence, 2003).
36. A rotation is the (usually) six-month period of a peace-support operation during which the same troops are involved. For example: SFOR 13 is the 13th rotation of SFOR.
37. Highly visible quick impact projects to win the 'hearts and minds' of the population are often criticized by humanitarian organizations since they are not based on the local needs but on the benefits to the military force.
38. G. Frerks, D. Hilhorst and A. Moreyra, *Natural Disasters, a Framework for Analysis and Action* (Wageningen: Wageningen University, Disaster Studies, 1999).
39. Thomas G. Weiss and Cindy Collins, *Humanitarian Challenges and Intervention* (Boulder, CO: Westview Press, 1996).
40. NATO.
41. J. Mackinlay (ed.), *A Guide to Peace Support Operations* (Providence, RI: The Thomas J. Watson Jr Institute, Brown University, 1996).
42. Slim.