



**VALUE FOCUSED THINKING FOR NATION BUILDING IN AFGHANISTAN
A REGIONAL PERSPECTIVE**

THESIS

Muhammad Sharjeel Riaz,
Wing Commander, PAKISTAN AIR FORCE

AFIT-OR-MS-ENS-12-22

**DEPARTMENT OF THE AIR FORCE
AIR UNIVERSITY**

AIR FORCE INSTITUTE OF TECHNOLOGY

Wright-Patterson Air Force Base, Ohio

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Muhammad Sharjeel Riaz,
Wing Commander, PAKISTAN AIR FORCE

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NATION BUILDING IN AFGHANISTAN
A Regional Perspective

Muhammad Sharjeel Riaz,
Wing Commander
PAKISTAN AIR FORCE

Approved:

//signed//
Richard F. Deckro, DBA, (Advisor)
Professor of Operations Research
Department of Operational Sciences

15 March 2012
date

//signed//
Matthew J. Robbins, Maj, USAF (Reader)
Assistant Professor of Operations Research
Department of Operational Sciences

15 March 2012
date

Abstract

This thesis is an effort to mathematically model the nation building effort in the in Afghanistan. The difference that I intend to make from the work of my predecessors on the similar topic is to address the problem from a local person's perspective who understands the culture better than a foreigner. The thesis focuses on developing a hierarchy on the areas that need to be focused on and that will have a far more significant and immediate impact on the masses. This, in turn will be enable us to fight terrorism through educating the people who till now feel neglected. At the same time the humanitarian efforts will be in synchronization with Islamic and cultural principles of Afghanistan that shall improve the impression of Westerners in the hearts and minds of the people and thus will be able to achieve a quicker and more decisive victory in the global war on terror.

On a technical note this thesis employs value focused thinking to categorize the factor in descending order of priority that we need to focus on for nation building. This work adds a new dimension to the models already available in the field and is likely to be more readily embraced by the local people who at times are in conflict with American priorities. Choosing the right areas through the scientific approach of value focused thinking with a Pashtun Decision Maker also helps in allocating weights for specific areas thus contributing in better and more effective

utilization of tax payers money that would bring peace and prosperity more swiftly and help build a more stable region which is our ultimate desire.

*To my parents, teachers and family, without their love and support, I would have never
had been able to complete this work*

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List of Terms

AFT	Alternative Focused Thinking
AHP	Analytical Hierarchy Process
ANA	Afghan National Army
ANP	Afghan National Police
DA	Decision Analysis
MCDA	Multicriteria Decision Analysis
MODA	Multiobjective Decision Analysis
PAF	Pakistan Air Force
SDVF	Single Dimensional Value Function
SSTRO	Security Stability Reconstruction Transition Operations
USAF	United States Air Force
VFT	Value Focused Thinking

NATION BUILDING IN AFGHANISTAN

A REGIONAL PERSPECTIVE

I. Introduction

1.1 Background

Since the Second World War, the world has seen a great deal of efforts focused on nation building especially by the United States of America. Be it in post war Germany or Japan, the battle ridden African countries or terrorist rich Iraq or Afghanistan, US presence has been witnessed everywhere with an effort to rebuild both politically and economically these torn nations. However, despite these massive efforts to rebuild, that have cost USA billions of dollars, we do not see the desired results in such efforts barring Japan and Germany. At the same time, US actions have not always been welcomed in totality by these conflict ridden countries for a host of reasons and the fact that US popularity graph has declined significantly in the last decade especially in the Muslim world is supported by a study⁵ carried out in 2002 across 44 countries.

This thesis makes an attempt to identify the reasons for not achieving the projected success in US efforts and suggests a Value Focused Thinking model (VFT) model to rank and pursue options that will produce a much needed and desired effect that can be felt immediately by all stake holders. In order to establish why this study differs from the

previous studies in this area others we examine some of the agreed upon reasons in ongoing nation building efforts.

The New York Times in its editorial⁶ note in the issue of 27 September 2001 write that

“The United States has a long and calamitous history of toppling unfriendly foreign governments. The damaging repercussions of cold-war coups in Iran and Guatemala haunt Washington to this day. As President Bush draws up plans to deal with Afghanistan, apparently the first target in the war against terrorism, he must do a better job than some of his predecessors in thinking through the potential consequences of American intervention. There are a lot of tripwires on the road to Kabul. Mr. Bush has begun suggesting that the Taliban should be overthrown. But engineering the ouster of the Taliban, which have let Osama bin Laden hide out in Afghanistan for years, could engulf Afghanistan in civil war, aggravate a growing refugee crisis on Afghanistan's borders and even destabilize Pakistan. Any of these developments would embolden terrorists and undercut American interests”.

The opinion author needs to be commended for his cautious analyses as this is precisely what is happening today in Afghanistan and Pakistan. Interestingly Diana⁷ West in her blog titled “Nation building in Afghanistan: It did not work the first time” on 04 October, 2009 quotes the statement of Gen McChrystal in London ;

“We don’t win by destroying the Taliban,” he said. “We don’t win by body count. We don’t win by the number of successful military raids or attacks, we win when the people decide we win.”

General McChrystal chose an audience⁸ of military specialists at London’s Institute for Strategic Studies as a platform for a public airing of the confidential assessment of the war after 100 days of assuming command in Afghanistan. He continued:

“Why isn’t the situation better after eight years?” he said. “Afghans’ expectations have not been met. ...

McChrystal said a clear change in “mindset” was needed because many current tactics are counterproductive and producing hostility and skepticism among Afghan civilians who must be convinced the coalition forces will improve their safety and quality of life. Thus, it is this aspect of Afghan social life where the US government has failed to meet people’s expectation of security and quality of life in post Taliban era. A common Afghani does not get affected by the pro or anti US afghan government officiating in Kabul; what affects him is his basic needs that are still not fulfilled except in a few metropolitan cities in Afghanistan. Secretary of Defense Robert Gates in his speech at The Heritage Foundation's Lehrman Auditorium on 20

February 2009 in Washington DC¹ highlighted that it is possible to attain "our strategic objectives of: an Afghan people who do not provide safe haven for al Qaeda, reject the rule of the Taliban, and support the legitimate government they elected and in which they have a stake." Which are in fact a little humble compared to the objectives stated when President Bush Released National Strategy for Combating Terrorism on February 14, 2003, The White House

Bush administration² during the initial days of war on terror. These objectives were defined as:

- (a) Defeat terrorists such as Osama bin Laden, Abu Musab al-Zarqawi and destroy their organizations
- (b) Identify, locate and destroy terrorists along with their organizations
- (c) Deny sponsorship, support and sanctuary to terrorists
 - i. End the state sponsorship of terrorism

- ii. Establish and maintain an international standard of accountability with regard to combating terrorism
- iii. Strengthen and sustain the international effort to fight terrorism
- iv. Work with willing and able states
- v. Enable weak states
- vi. Persuade reluctant states
- vii. Compel unwilling states
- viii. Interdict and disrupt material support for terrorists
- ix. Eliminate terrorist sanctuaries and havens

(d) Diminish the underlying conditions that terrorists seek to exploit

- i. Partner with the international community to strengthen weak states and prevent (re)emergence of terrorism
- ii. Win the war of ideals

(e) Defend US citizens and interests at home and abroad

- i. Implement the National Strategy for Homeland Security
- ii. Attain domain awareness

- iii. Enhance measures to ensure the integrity, reliability, and availability of critical physical and information-based infrastructures at home and abroad
- iv. Integrate measures to protect US citizens abroad
- v. Ensure an integrated incident management capability

It is clearly evident from these objectives the US administration listed removing the conditions that are favorable for the terrorists to exploit, it is in this context that this thesis makes a step towards identifying avenues and rank them according to their hierarchy through VFT analysis.

An overview of the data reveals that campaign in Afghanistan happens to be the longest conflict United States had fought resulting in the record number of bombs dropped and incidentally one of the highest number of civilian casualties that is considered collateral damage since the Second World War. This conflict has also accounted⁹ for over 30,000 civilian casualties in Pakistan due to suicide bombings and insurgent activities that are claimed to be fallout of ISAF operations in Afghanistan. The key point is that a number of people who end up being recruited in Taliban ranks and thus agree to be exploited in the name of Islam are in fact those who are alienated by US actions where they lost a blood relative or a friend during the conflict and the Pashtunwali¹⁰ tradition inspires them to rise up for revenge. Revenge (Badal) that has so much importance in Pashtunwali culture and to this day vengeance is protected and passed on from one

generation to other. Further reasons for the outburst are the drone strikes that according to Daniel Byman from the Brookings Institution ends up killing 10 civilians¹¹ for every militant and therefore the US initiatives like dropping food and ration and acts of social welfare go in vain. It is does not take rocket science to establish that humans do not like to be bombed into submission and especially Afghans that are less cultured and less civilized by American standards are compelled to rebel against anyone trying to impose his will on them. Afghans³ are very proud of their land, religion and ancestry. They value their independence beyond life. These highlanders are known for their loyalty to the clan, and due to clan warfare, they seem always up-in-arms to settle disputes. However, this is wrongly interpreted as a preference for violence. This particular trait is the result of consistent foreign invasion.

Therefore the afghan reaction to US demands after the horrific attack on World Trade Center in 2001 could have been predicted fairly accurately by analyzing the Afghan history (reference of historical book), culture and traditions of the land especially their loyalty to their clans. Add the limited education, lack of infra structure and basic facilities coupled with a Taliban government not blessed with diplomatic acumen they perceived that they had practically nothing to lose since the country has been war torn since 1979. Thus when Richard Armitage⁴ threatened to bomb Pakistan into the Stone Age it was a dreadful scenario for Pakistani government but the Afghans were not intimidated by such a threat.

It is said that the winners write history; however, the region's history was unanimous as *declaring* Afghanistan as graveyard for intruding forces. The terrain and the weather coupled with a hostile local population are an invaders' biggest enemy and the Fourth generation warfare in the Hindu Kush on the eastern side of Afghanistan was definitely a new tactical experience for the US and NATO soldiers. Thus when the initial effort to support the logistics infrastructure was made analysts could comment that US estimates of this conflict were definitely not for the very short term. In fact the envisaged road map was pretty clear, a massive projection of power for a short time that shall result in over throwing Taliban government. The next step was establishing a local government and then focuses on SSTRO and nation / state building efforts. After the fall of the Taliban government, the US did make serious efforts in rebuilding Afghanistan and bringing a better standard of life to the common man. It is indeed unfortunate that these efforts did not succeed to the satisfaction of a common Afghani. It is in these avenues, that this thesis attempts to suggest areas for focus, where relief would be felt by the masses and, thus, the global objective of preventing terrorists to recruits innocent people will be achieved in a more effective and efficient manner, this is necessary because the War on Terror will only be over when the people stop harboring and aiding the terrorists.

1.2 Problem Identification

The ongoing war on terror has taken longer than what everyone publically perceived, In addition, the process of rebuilding Afghanistan and Iraq has just started; the political

changes in Libya, Egypt, and possibly Syria, will eventually require rebuilding those nations and bringing relief to the people. The US government may not be directly involved in all these efforts; however, a fresher model with a local person's perspective is definitely something that should be considered. This thesis uses Value Focus Thinking (VFT) developed from a regional cultural impact to prioritize the areas that need to be pursued. The weighting of areas or ranking them in hierarchy will facilitate the reader to analyze the ongoing US SSTRO efforts in Afghanistan and ascertain if there needs to be a shift in focus while pursuing them. At the same time, this thesis will develop an insight into the cultural and social beliefs of people in Afghanistan, which is quite similar to a number of developing Muslim nations across the globe.

1.3 Research Scope

This thesis focuses on assessment of stability and nation building efforts at the strategic level. The objective of the thesis is to provide the decision makers with a tool to prioritize and assess stability operations in Afghanistan when viewed from a non US perspective. This thesis may also be used a tool to compare the current model being implemented in Afghanistan by the Department of Defense (DoD). The objectives for the model being developed emphasize that it shall be flexible to changes in doctrine, measures and weighting criteria, it shall be analytically rigorous to provide accurate information, it shall be simple and easy to understand, implement and analyze.

1.4 Research Assumption

The decision maker for the decisions made in this model is a high ranking military officer who is presently serving as diplomat in the Embassy of Pakistan in Washington DC. A seasoned professional who has served key command and staff appointments in his military career, he was selected because of the non-availability of a credible Afghani source. The added advantage of a Pashtun background gives the decision maker ability to understand the culture and values in subtle and more insightful ways thus making the model as realistic as possible.

1.5 Thesis Organization

This thesis consists of five chapters. Chapter 2 presents a literature review of Value Focus Thinking and the development of stability operations. Chapter 3 highlights the methodology of assigning hierarchy to various areas that shall be employed in stability operations after testing their relevance through regression analysis. Chapter 4 illustrates the application and analysis of the model developed after using the weights assigned through value focus thinking by the decision maker. Chapter 5 shall review about the limitations and the strengths of the model developed. It also suggests avenues for future research and identifies areas of further embellishments in this model.

II. Literature Review

This chapter focuses on the existing research that is directly applicable to Decision Analysis (DA), Value Focused Thinking (VFT), Security, Stability, and Transition and Reconstruction Operations (SSTRO). The chapter initially focuses on reviewing the basics of DA and VFT since VFT is the technique suggested for nation building in this thesis. It then focuses on the history of SSTROs and the specific guidance and principles laid down in Islamic faith. Subsequently, published works of various authors in the field of nation and state building are discussed to develop a basis for understanding the important attributes of SSTRO. An effort was made to highlight the cultural and religious requirements in Afghanistan to make the whole process more beneficent and fruitful to the masses in Afghanistan.

2.1 Decision Analysis Overview and Value Focused Thinking

Decision making is a process that everyone has to endure in life. It could be simple decisions like which automobile to buy or decisions that have large stakes and consequences involved like strategy decisions for a multinational consortium. At the same time decisions could be time sensitive like an emerging terrorist target picked up by a Predator UAV. In a military organization, correct and timely decision making is an essential attribute desired of an officer. In fact people are groomed in this aspect throughout their career in order to be able to take massive decisions later in their life as generals and commanders. It would therefore, be pertinent to define a decision and revisit some essentials of the decision making process.

Good Decision In Decision Analysis a good decision is the one that has the lowest chances of getting the worst outcome based on the given probabilities of occurrence. In order to reach good decisions we follow the Decision Analysis (DA) techniques which is explained in Figure 2.

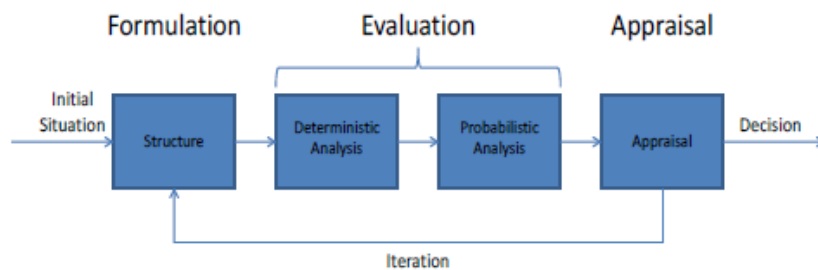


Figure 2 Decision Cycle (Oper 543 Class presentations, 2010, Major J D Robbins)

In order to make good decisions most of the time, it is important to understand the key concepts in Decision Analysis.

Decision Analysis

Decision Analysis is a logical procedure for the balancing of the factors that influence the decision. It takes into account all the factors that affect the decision situation. According to Dr Howard, in his work on Applied Decision Theory DA essentially incorporates three phases, which are:-

- (a) Deterministic
- (b) Probabilistic
- (c) Post – Mortem

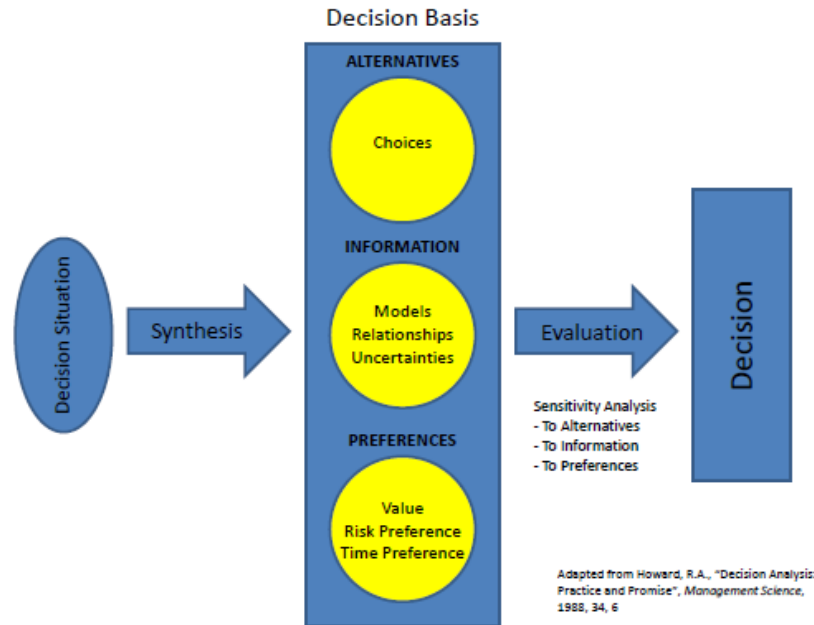


Figure 3 Elicitation and Evaluation of the Decision Basis (Howard, decision Analysis: Practise and Promise, 1988)

Deterministic Phase

In this phase the following actions are performed:-

- (a) Define the decision.
- (b) Identify the alternatives.
- (c) Assign values to outcomes.
- (d) Select state variables.
- (e) Establish relationship at state variables.
- (f) Specify time preference.

During this phase, the Decision Maker (DM) determines if there is a decision to be made or he/ she has to contemplate those things beyond his control (out comes); the

distinguishing factor is the allocation of resources that separates a decision situation from others. After ascertaining the necessity of a decision, the available alternatives or options are sought. The next step is to rank the available alternatives. If one is dealing with monetary issues, this ranking is easier, whereas, for problems like nation building, this ranking is one of the most difficult aspects; it may consume a large amount of time and discussions before a consensus amongst the stake holders can be developed. Dr Howard suggests assigning values to different outcomes and the variable associated with them. These variables are defined as state variables. A few examples of state variables could be the manufacturing costs, failure rate of the product and so forth. The next step is to determine the relationship between state variables analyzing their impact on performance. The aim of this exercise is to develop a utility function and later we conduct sensitivity analysis on this function that will help us in determining the effect on our function with a change in a state variable.

Sensitivity analysis highlights the importance of uncertainty and helps to find dominated alternatives in order to eliminate them and identify crucial state variables for the probabilistic phase.

Probabilistic Phase

In this phase, as the name suggests, probabilities and uncertainties are determined for crucial state variables, statistically these are termed as prior probabilities. Howard then suggests carrying out profit lotteries for each alternative. These are probability distribution of the profit and can be determined analytically or through numerical analysis. The distributions for the different alternates are then plotted and the dominant

solutions are chosen if they exist. Dr Howard terms this dominance as stochastically dominant. The figure below depicts stochastic dominance where $G(x)$ has stochastic dominance over $F(x)$.

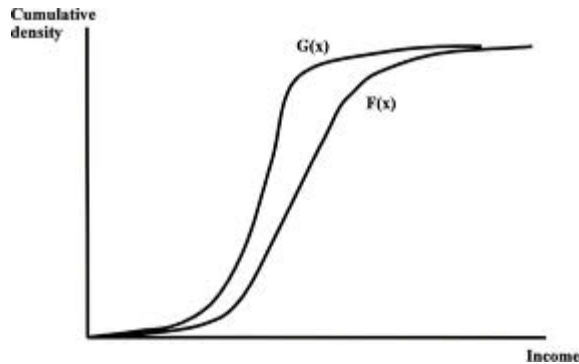


Figure 4 Stochastic Dominance

It is in this phase that inferior alternatives are discarded, whereas the best alternate has the highest utility.

Post Mortem Phase

This is the analysis phase of the decision making process. The dollar value equivalents to the uncertainties are formulated in this phase and the emphasis remains on finding out the impact of uncertainties on the profit. The next logical course of action is to find out the most economical way to gather information if it is deemed necessary. The information is gathered if it is expected that probabilities will change as a consequence of such an effort and then reanalysis is executed with the new set of probabilities. The end product of all these processes discussed above is a quality decision which should be the optimum for the given set of conditions. The ingredients of a quality

decision are further elaborated in Figure 5, the important aspect to note, “What choices are available?”

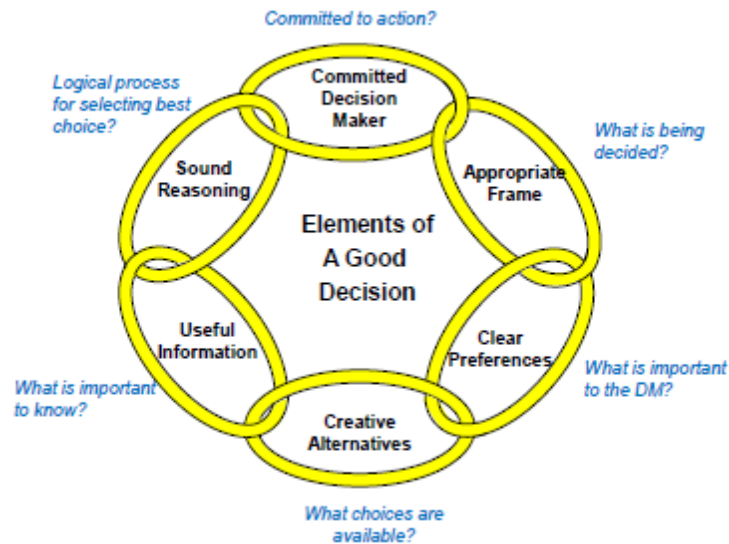


Figure 5 Elementsof a Good Decision (Oper 543 Class presentations, 2010, Major J D Robbins)

It is precisely this aspect that distinguishes Value Focused Thinking (VFT) from the alternative focused thinking in realms of Decision Analysis.

2.1.2 Value Focused Thinking

The basic idea behind the term value focused thinking (VFT) is to be proactive rather than reactive in critical decision making issues. In VFT, **values** should be the driving force behind decision making. Ralph Keeney believes that values are more fundamental to a decision problem than alternatives. He advocates spending more time on understanding the values and understanding what is important and then using the values to create

better alternatives than those already defined. In simple words VFT consists of two activities: first decide what is important and then figuring out how to get it.

Another approach to understanding VFT would be to compare it to alternative focused thinking as described by (Keeney R. , 1992). In alternative focused thinking, the decision maker (DM) is following a reactive approach. In the military scenarios, the major advantage of alternative-focused thinking is that the analysis focuses directly on the alternatives of interest to commanders and their staffs. However, it is possible that none of the alternatives meet the commander's intent. In addition, the commander's options are limited, he has a set of alternates available and he chooses one out of that set that seems to be the best suited for his decision situation.

In VFT instead of simply choosing from the alternates available, the DM iterates and finds out the best alternate for a decision situation based upon what he values.

According to Keeney, VFT has three major ideas: start with values, use values to generate better alternatives, and use values to evaluate those alternatives. The values are the ideals that can be agreed upon through deliberation. In a military context this is the Commander's intent, the ideal outcome desired of a particular decision situation.

(Parnell G. S.)

We can summarize VFT as an approach where you first decide what your values are in relation to the decision and what exactly would you like as an outcome. After ascertaining the value, you strive to achieve your desired outcome. In this manner instead of choosing from a given alternate you strive to create your own alternatives

which definitely have morale and intrinsic benefits along with the best possible course of action. VFT is especially helpful in military organization and large companies where groups of decision makers are facilitated to reach a consensus thereby increasing ownership the decision taken.

In order to understand the VFT process, it is pertinent to know some of the terminologies commonly used in the decision making process. The key terminologies used in VFT are listed in Table 1.

In organizations such as the Air Force, Value-focused thinking allows for defensible initiative selections. The fundamental objective, and select values comprising it, may be taken directly from existing policy documents (e.g., Air Force Instructions/ Orders).

Using existing policy documents is known as the “gold standard” and yields the most defensible final decisions. They are normally called the Standard Operating Procedures (SOPs) or Air Force Orders (AFO) in Pakistan Air Force (PAF).

Key Terminologies in VFT

Fundamental Objective	“...an essential reason for interest in the decision situation” (Keeney, 1992:34). Also known as the “ends objective,” it is the top block in the value hierarchy.
Value	What is important to the decision maker. The values are the decomposition of the fundamental objective. They are the building blocks of the value hierarchy (Keeney R. , 1992).
Value Hierarchy	A pictorial representation of a value structure (consisting of the fundamental objective, the values, and the measures) (Kirkwood, 1997:12).
Local Weight	The amount of weight a set of lower-tier values or measures contributes to the value directly above it in the hierarchy (Shoviak, 2001:57).
Global Weight	The amount of weight each lower-tier value or measure contributes to the weight of the hierarchy’s fundamental objective (Shoviak, 2001:57).
Measure	Analogous to the term “metric,” it notes the “degree of attainment” of a value (Kirkwood, 1997:12).
Score	A “specific numerical rating for a particular alternative with respect to a specified measure” (Kirkwood, 1997:12).
Single dimensional value function (SDVF)	A specific, monotonically increasing or decreasing function for each measure used to convert an alternative’s “score” on the x-axis to a “value” on the y-axis.
Alternative	“...the means to achieve the... values” (Keeney, 1992:3).

Table 1 Key Terminologies in VFT

2.1.3 Steps to Building a VFT Framework

The VFT process is an important instrument having four primary applications. First, it assists organizations in collecting relevant information. Once the values are identified, it is easier to determine, what is important and relevant. Thus the focus stays on collecting relevant data for the Decision Maker, thereby ensuring efficient and economical efforts. Second, in the absence of preexisting alternatives, the VFT process facilitates focused brainstorming that leads to the development of alternatives which address values important to a decision. Third, the VFT process promotes clear communication. It demonstrates to stakeholders what the decision makers consider important. In so doing, it facilitates the objective defense of specific alternative selections. Finally, the VFT process provides the model for evaluating, and subsequently ranking, the alternatives with respect to the value added to an organization (or individual) (Kirkwood, 1997:22-23).

The construction of a decision analysis framework, based on the VFT process, fits into 10 steps compiled by Shoviak (2001:63) during his thesis at the AFIT. The steps are mentioned below:

- (i) Problem Identification
- (ii) Construct Value Hierarchy
- (iii) Develop Evaluation Measures
- (iv) Create Value Functions

- (v) Weight Value Hierarchy
- (vi) Alternative Generation Value Model
- (vii) Alternative Scoring
- (viii) Deterministic Analysis
- (ix) Sensitivity Analysis
- (x) Conclusions & Recommendations

2.2 Value Focused Thinking Steps

2.2.1 Problem Identification

The problem identification is the corner stone for the whole process; correct identification of problem will result in correct decision-making. If the problem is incorrectly identified, the resulting solution will have limited or no value and ultimately be considered wasted effort.

2.2.2 Construct the Value Hierarchy

The value hierarchy serves the decision maker as a model for evaluating alternatives. It structures the organizational values, beginning with the fundamental value (e.g., the organization's reason for existing) and ending with the measures used during the evaluation process. Additionally, placing values in a hierarchy aids an organization in identifying whether any values are missing and, in doing so, specifies the type of value needed (Keeney, 1992:69). Since the value hierarchy will be used by the organization to make decisions, it must be defensible. In other words, the hierarchy must be in sync

with the organization's mission, particularly if the leadership has previously documented the fundamental objective (i.e., mission) of the organization.

2.2.3 Desirable Properties of Value Hierarchies

"Completeness, non redundancy, decomposability, operability, and small size" are five properties of value hierarchies identified by Kirkwood (1997:16-19). Completeness relates to the "collectively exhaustive" nature of each tier of a value hierarchy. In other words, all values in a single tier must include everything important to the "evaluation of the overall objective" (Kirkwood, 1997:16). Additionally, the evaluation measures must "adequately measure the degrees of attainment of their associated objectives" (Kirkwood, 1997:16). The property of Completeness assures that the alternatives are adequately evaluated and ranked accordingly.

The principle of non redundancy implies that the values of a single tier are considered "mutually exclusive." Non redundancy is necessary to avoid duplication of scoring, the phenomena of a particular alternative receiving "more weight than was [originally] intended" (Kirkwood, 1997:17).

Decomposability is commonly referred to as independence. It means that the score an alternative receives for one evaluation measure should not influence its score in another measure. An example from Kirkwood illustrates this concept. Assume a value of "economic issues" with lower-tier values of "salary," "pension benefits," and "medical coverage." Note that for any one of these lower-tier values, the "value attached to variations in the score... depends on the levels of the other two lower-tier values." That

is, if the “salary” were \$500,000 a year, there would be limited value to slight increases in “pension benefits” and “medical coverage.” Thus, the values are not independent (Kirkwood, 1997:17-18).

Operability is simply defined as user friendliness that a value hierarchy exhibits to the individual or organization. Since the value hierarchy facilitates communication and has potential to be used in defense of the selection of specific alternatives, it should be constructed as much as practical with the lay man in mind (Kirkwood, 1997:18). Finally, a small value hierarchy is more easily communicated and “requires fewer resources” to score the alternatives with respect to the evaluation measures (Kirkwood, 1997:18). A gauge to determine whether a value should be a part of a value hierarchy is known as the “test of importance.” This test indicates, with respect to the final ranking of alternatives, that a value should be included in the value hierarchy if it could lead to a difference in the top ranked alternative (Kirkwood, 1997:18-19).

2.2.4 Create Value Functions

Keeney (1992:56) notes, “The most obvious way to identify [values] is to engage in a discussion of the decision situation.” This emphasizes that there is a high degree of interaction required to establish an individual’s or group’s values. To aid in the interaction, Keeney (1994:34-35) developed a list of “techniques for identifying” values and accompanying questions that “may be asked to aid the decision-maker during the process” (Shoviak, 2001:48). As shown in Table 2:-

Techniques for Identifying Values

Technique	Questions
Develop a wish list	What do you want? What do you value? What should you want?
Identify alternatives	What is a perfect alternative, a terrible alternative, some reasonable alternative? What is good or bad about each?
Consider problems and shortcomings	What is wrong or right with your organization? What needs fixing?
Predict consequences	What has occurred that was good or bad? What might occur that you care about?
Identify goals, constraints, and guidelines	What are your aspirations? What limitations are placed on you?
Consider different perspectives	What would your competitor or constituency be concerned about? At some time in the future what would concern you?
Determine strategic [values]	What are your ultimate [values]? What are your values that are absolutely fundamental?
Determine generic [values]	What [values] do you have for your customers, your employees, your shareholders, yourself? What environmental, social, economic, or health and safety objectives are important?

Table 2 Techniques for identifying Values (Keeney, 1994:34-35; Shoviak, 2001:48)

Keeney (1994:34) admits that if one uses each technique in discerning values, a certain amount of redundancy will be generated. However, he notes “redundancy is not a

shortcoming in this endeavor. It is much easier to recognize redundant [values] when they are explicitly listed than it is to identify missing [values].”

If the values are simply arrived at through interviews and discussions with the individual or group, the term “silver standard” is used to describe that degree of interaction.

However, if interviews and discussions with the individual or group indicate values that precisely coincide with documented principles (e.g., Air Force Orders), the term “gold standard” is used to describe that degree of interaction.

2.2.5 Structuring the Values

The value hierarchy is so named because the values are structured in hierarchical fashion. At the top is the overarching, fundamental objective of the organization. Immediately below the fundamental objective is the first-tier of values. Each value equidistant from the top of the hierarchy constitutes a tier. The second-tier is comprised of values that better define (or decompose) those values in the tier above. As the tier structure of a value hierarchy continues, the lower-tier values describe the important attributes of those values higher in the hierarchy. The process continues until a level is reached that can be expressed as an evaluation measure.

2.2.6 Develop Evaluation Measures

According to Kirkwood, the evaluation measures specify the “...*degree of attainment of objectives. Evaluation measures allow an unambiguous rating of how well an alternative does with respect to each [value]*” (Kirkwood, 1997:24). When a value cannot be further refined into values that are more specific, a determination of “what measure

adequately captures that value?” must be made. It may require more than one measure to completely address a specific value. He further states that, “Using several evaluation measure scales could give a misleading indication of the relative importance [of the particular value being measured].” In the same context, he notes that “subdividing [a particular value into multiple measures] could require more effort than is warranted to obtain scores for the lower-tier evaluation measure scales...the resulting scores could give an unwarranted indication of accuracy.” The final concept to understand about evaluation measures is that they have scales that are either natural or constructed.

2.2.7 Desirable Properties of Evaluation Measures

Keeney (1992:112) identifies three desirable properties of evaluation measures:

“measurability,” “operationality,” and “understandability.” Measurability “defines the associated [value] in more detail than that provided by the [value] alone”

(Keeney, 1992:113). In other words, the evaluation measure must clearly and appropriately quantify what the decision-maker (DM) is interested in and nothing more. Operationality implies that a measure needs to specify consequences with respect to its specific value and “provide a sound basis for value judgments” regarding the “desirability of the various degrees to which [that value] might be achieved.” Features of operationality include definitive locations, methods, and measurement frequencies (Keeney, 1992:114). Understandability implies there is “no loss of information when one person assigns [a measure] level to describe a consequence and another person interprets that [measure] level” (Keeney, 1992:116). A concept integrated with each desirable property is that of being “unambiguous.” That is, every measure should have precise

“levels of achievement” (Keeney, 1992:112). To further illustrate these properties, consider the example shown in Figure 6, as adopted from Keeney (1992:116). Measure 1 is unambiguous and a score of 25 fits specifically on the scale. Therefore, a score plotted on the x-axis cannot be misinterpreted. However, Measure 2 is vague and ambiguous. In other words, what is specifically meant by “low” or “moderate?” A definition of “low” for one individual can be very different for another. If Measure 2 were used, it would be necessary to quantify the levels. For example, “none” might mean 0 to 4, “minimal” might mean 5 to 15, and so on.

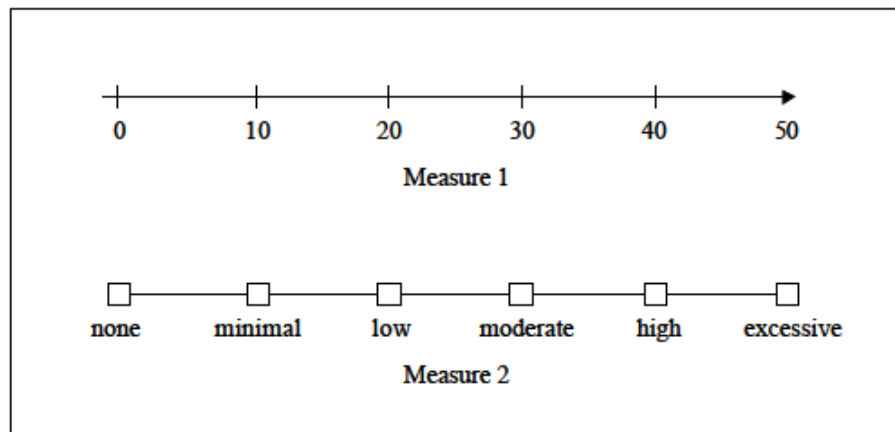


Figure 6 Clarity in Evaluation Measures (Jurk, 2002)

2.2.8 Create Value Functions

In order to properly analyze alternatives, the individual evaluation measure scores must be converted to a common score having units of “value” between 0 and 1. Using this convention, “the least preferred score being considered for a particular evaluation measure will have a single dimensional value of zero, and the most preferred score will

have a single dimensional value of one” (Kirkwood, 1997:61). While the least preferred and most preferred scores could be fixed with any set of numbers, e.g., 0 and 10 or 0 and 100, the 0 and 1 scale is the accepted standard in decision analysis practice. In other words, an alternative having the least preferred scores for each measure will have an overall value ranking of 0, and an alternative having the most preferred score for each measure will have an overall value ranking of 1 (Kirkwood, 1997:61). Converting the scores to units of value is accomplished through single-dimensional value functions (SDVFs). The SDVFs allow the analyst to determine the “common value” for alternatives not scoring at either extreme and are the functions that ultimately remove subjectivity from the value model. The analyst develops SDVFs by soliciting the DM’s experience and judgment.

2.2.9 Value Function Type

While there are numerous types of SDVFs the two primary types are piecewise linear (PL) and exponential (E). Kirkwood (1997:61) notes that “...a piecewise linear single-dimensional value function [is usually used when the measure] has a small number of possible different scoring levels.” However, he also notes that either SDVF form (i.e., PL or E) may be used for an evaluation measure with a “difference [that] is often not of practical significance”. A discrete SDVF is used when the data available for the alternatives is non-specific.

2.2.10 Weight the Value Hierarchy

A useful value model requires the DM to indicate the degree of importance for every value and measure, comprising each branch and tier of the hierarchy, by assigning them local weights. An important property of the hierarchy is that the local weights for each branch and each tier, taken separately, must sum to 1.0. The method for determining local weights requires value judgments from the DM. To illustrate this, the following example will be used (Shoviak, 2001:57). The DM begins by determining the weights of the values at the lowest-tier for each branch of the hierarchy and progresses upward to the first-tier. This technique allows a more organized flow for the DM to conceptualize exactly where in the hierarchy the value being weighted falls. This can be explained by the following example derived from (Jurk 2002).

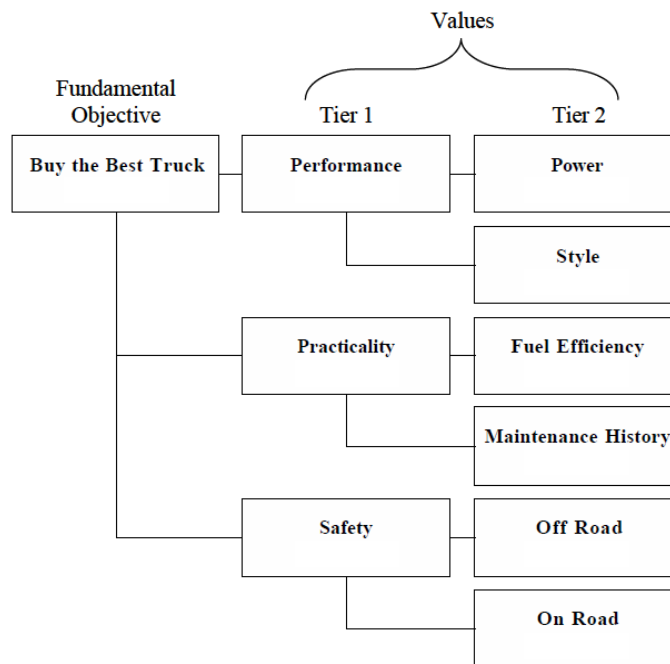


Figure 7 Buy the best truck value hierarchy (Jurk:2002)

Buy the Best Truck example, Off-Road and On-Road are the lowest-tier values under the Safety branch of the hierarchy. The DM must determine which is least important, Off-Road or On-Road, as they relate to the value of Safety. Suppose the DM indicates that Off-Road is least important. Off-road is subsequently assigned a value of “x.” The DM must next determine how much more important On-Road is in relation to Off-Road. The DM indicates On-Road is twice as important as Off-Road. On-Road is then assigned a value of “2x.” Recall the local weights for one tier of a branch must sum to one. Therefore, an equation can be written to solve for “x” and subsequently indicate the local weights. For example, notice that if $x + 2x = 1$ then $3x = 1$ and $x = 1/3$. The weights for Off-Road and On-Road, with respect to the value of Safety as shown in Figure 6, are therefore 0.333 and 0.667, respectively. This process is repeated for each tier of values and the measures. A single measure inherits the entire weight of importance for its associated value.

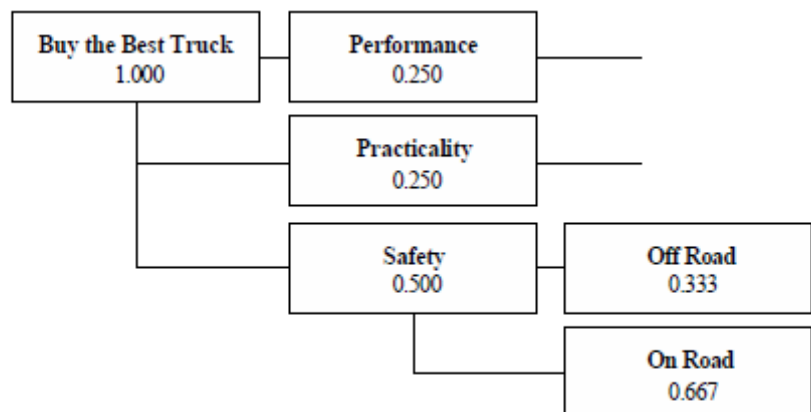


Figure 8 Determining local weights (Jurk, 2002)

Another method for determining local weights is called “swing weighting.” Swing weighting requires the DM to “compare individual attributes [i.e., measures] directly by imagining (typical) hypothetical outcomes” (Clemen, 1996:547). The procedure for using the swing weighting method is compiled from Kirkwood (1997:70). Essentially, the DM must examine each tier of values or measures individually and “consider the increments in value that would occur by increasing (or “swinging”) each [value] or measure from the least preferred end of its range to the most preferred...” The resulting increments are sequentially ordered by increasing value. Each increment is assigned a factor of importance as it relates to the smallest increment. The smallest value increment is then set so the “total of all the increments is 1.” The resulting increments that sum to one are solved as a system of equations with the same number of equations and unknowns. A DM can also use a technique known as the “100 ball” technique (i.e., direct weighting) to assign weights of importance to values and measures. This entails the apportioning of an imagined set of 100 balls to each value or measure, in a particular tier and branch, according to the importance placed on each by the DM. The number of balls (e.g., 67) assigned to one value or measure is interpreted as the DM saying, “67 percent of the emphasis is on this value when compared to others on the same tier and in the same branch.”

While the local weights indicate the importance placed on each value or measure by the DM, the global weights are a multiplicative function of the local weights and refer to how much weight each value or measure contributes to the overall fundamental

objective in the hierarchy. For instance, in the Buy the Best Truck example, shown again with the local weights in Figure 8, the first-tier value of Safety carries a local weight of 0.5 and its more specific values in the second-tier, Off-Road and On-Road, carry local weights of 0.333 and 0.667, respectively. In addition, the measures, Four-Wheel Drive and Frame Clearance have local weights of 0.8 and 0.2, respectively.

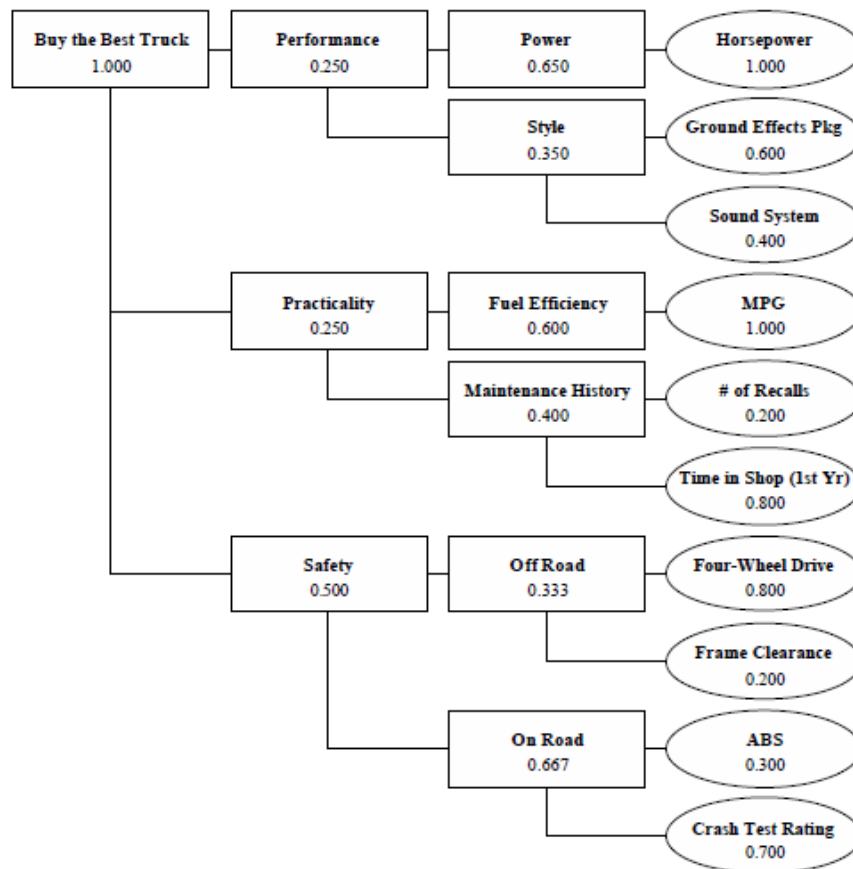


Figure 9 the Best Truck Value Hierarchy with Local Weights (Jurk, 2002)

Figure 10 subsequently shows the hierarchy with the global weights. The global weights for Off-Road and On-Road are $(0.5 \times 0.333) = 0.167$ and $(0.5 \times 0.667) = 0.333$, respectively. Likewise, the global weights for the measures Four-Wheel Drive and Frame

Clearance are the products of the local weights for Safety, Off-Road, and the respective measures. That is, $(0.5 \times 0.333 \times 0.8) = 0.133$ and $(0.5 \times 0.333 \times 0.2) = 0.033$. Any value or measure's global weight is the product of its local weight and the local weights of the values that build up to the fundamental objective. It is the individual attribute contribution to the overall score of the option being evaluated.

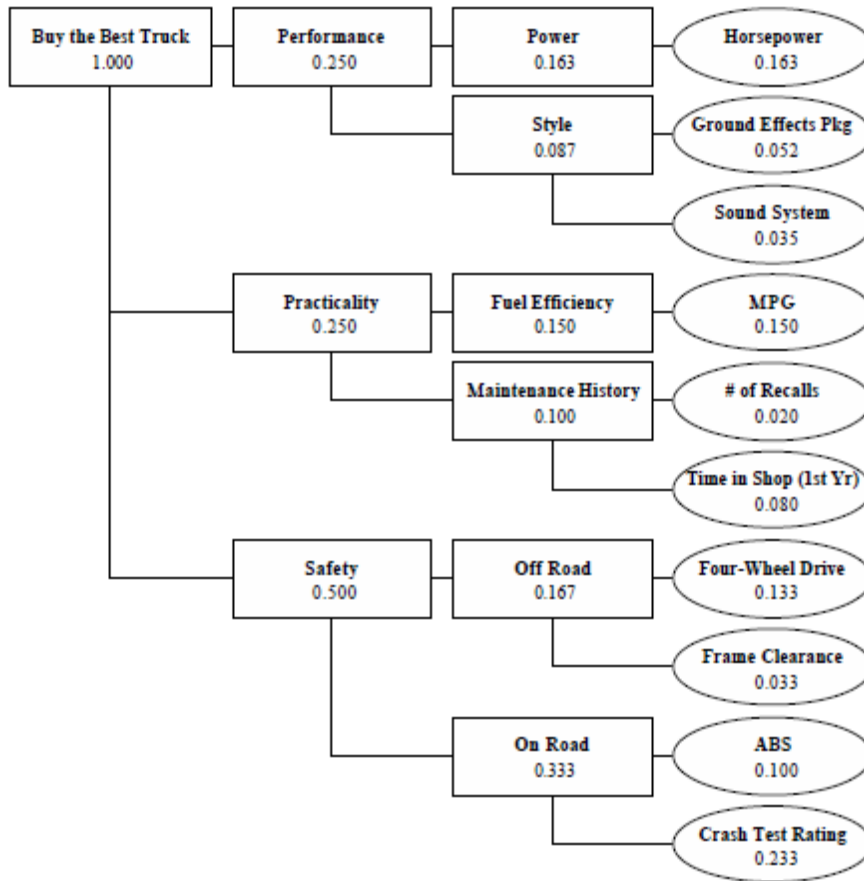


Figure 10 Buy the Best Truck Value Hierarchy with Global Weights (Jurk, 2002)

2.2.11 Alternative Generation

Keeney (1992:9) notes “the range of alternatives people identify for a given decision situation is often unnecessarily narrow...the first alternatives that come to mind in a given situation are the obvious ones...” One of the advantages of the VFT methodology is that it encourages development of creative alternatives, guided by the knowledge of the organizational values (i.e., the value hierarchy). Keeney (1992:198) states, “...alternatives should be created that best achieve the values specified for the decision situation...[In fact], alternatives themselves can trigger thought processes that generate new alternatives.” Depending on the situation, there are different techniques for actually generating the alternatives. Note that sometimes alternative generation is not necessary because the alternatives come from an outside source. Kirkwood (1997:44-50) highlights potential alternative generation dilemmas and gives proposed solutions, which are depicted in Table 3.

A strategy generation table is depicted below for use with the Buy the Best Truck example. The strategy generation table method is suggested by Howard (1988:684) and Kirkwood (1997:47-48) to both highlight alternatives that make the most sense (in the case of too many alternatives) and to stimulate creative thinking (in the case of too few alternatives). For each strategy theme, the DM must decide which type of truck, whether it is new or used, whether it has two or four-wheel drive, the amount available to spend, and the long term goal for the vehicle. The strategy generation table depicted as Table 4 shows different alternatives for each of these decisions. The table subsequently prompts the DM to consider different combinations of the alternatives to meet the strategy theme.

Common Alternative Dilemmas and Solutions

Alternative Dilemma	Proposed Solution(s)
Too many alternatives (Combinatorial problems)	Mathematical programming or optimization routines (e.g., integer linear programming).
Too many alternatives (Data collection problems)	Screening criteria capturing all probable alternatives so the most preferred alternative meets the criteria with ease. Strategy generation table to highlight which alternatives make sense and deserve a more detailed look.
Too few alternatives	Strategy generation table to highlight other potential column entries that may result in better alternatives. Develop a value hierarchy, if not already accomplished, and think of alternatives to maximize a higher-tier value.
Developing alternatives when there is uncertainty	Hedge against uncertainty by taking the middle ground (e.g., a mutual fund adds a certain amount of protection whether a single stock rises or falls in the future). Allow for sequential decisions in the future (e.g., spend more money up front to preserve options in light of uncertainty in the future). Share the risk generated by the uncertainty with a partner.

Table 3 Common Alternative Dilemmas and Solutions Kirkwood, 1997:44-50)

Strategy Theme	Type of Truck	New or Used	Utility	Prepared to Spend	Long Term Vehicle Goal
Vehicle to use while at college and on camping trips	Sport Utility Vehicle	New	Two-wheel drive	$\leq \$5,000$	Drive until it's dead with no preventative maintenance
Vehicle to commute around city as a young professional	Small pickup (e.g., Ford Ranger)	Used	Four-wheel drive	$\leq \$20,000$	Turn in for new vehicle after two years
Vehicle to use on the farm or construction site	Full size pickup (e.g., Ford F-150)			$\leq \$30,000$	Treat as lifelong investment

Table 4 Strategy Generation Table (Jurk, 2002)

2.2.12 Score the Alternatives

The next step in the process is to score the alternatives, to properly use the value model and score the given alternatives; data coinciding with the information required for the measures must be collected for each alternative. Typically, a forum of subject matter experts considers each alternative for a particular measure before advancing to the next measure. This allows the subject matter experts to maintain clarity for each measure definition and its associated categories along the x-axis and ensures each alternative is scored with consistency. Ideally, the forum of subject matter experts arrives at a consensus for each score an alternative receives. This adds defensibility to the final value ranking of the alternatives because it eliminates the uncertainty factor associated with each score an alternative receives.

2.2.13 Perform Deterministic Analysis

Deterministic analysis is the mathematical process of combining the score of every measure (per the SDVFs) and the associated weights of importance for each alternative. This process requires a mathematical equation known as the value function “which combines the multiple evaluation measures into a single measure” depicting the overall value attained by each alternative (Kirkwood, 1997:53). Kirkwood (1997:53) highlights two requirements for determining a value function: “single dimensional value functions be specified for each evaluation measure [and] weights be specified for each single dimensional value function.”

There are two primary value function types used in VFT: additive and multiplicative. The additive value function is simplistic and encourages easy, detailed sensitivity analysis; it is also the most commonly used type in decision analysis practice (Kirkwood, 1997:230; Shoviak, 2001:60). A key assumption for the additive value function is that each SDVF allows a value of “0 for the worst ...and 1 for the best evaluation measure score” (Shoviak, 2001:60). The additive value function $v(x)$, read as the value of the x alternative, shown in Equation 1, is the weighted sum of the translated measure scores.

$$V(x) = \sum \lambda_i v_i (x_i)$$

Equation 1 Additive Value Function

That is, the value function, $v(x)$, is the sum of the individual products obtained when the translated score for each evaluation measure, $v_i(x_i)$, is multiplied by its associated weight, λ_i (Katzner, 2002; Kirkwood, 1997:230). The expression $v_i(x_i)$ is interpreted as the translation, to a common “value” unit, of a particular alternative score, x_i , by the i th measure’s single dimensional value function, v_i .

2.2.14 Perform Sensitivity Analysis

Sensitivity analysis (SA) is performed as a “post deterministic analysis.” SA highlights the “impact on the ranking of alternatives [based on] changes in the modeling assumptions” (Kirkwood, 1997:82). The predominant form of SA examines the impact of changes to the weights assigned by the DM to the higher tiers of the hierarchy. This is valuable

because it shows how each alternative changes in ranking as the weight of any higher-tier value varies. The weights of the remaining values in that tier are held proportional and still sum to 1. Sensitivity analysis can be accomplished at any level in the hierarchy. Typically, it focuses on higher-tier values because changes in the weights of the lower-tier values do not have as much impact on the overall ranking of the alternatives. Sensitivity analysis may be of interest to a DM because of the potential disagreement between stakeholders regarding the weights and the affect on the final ranking of the alternatives. A SA identifies the range in weights a value may assume before the ranking position of alternatives change and ultimately affect the DM's final decision.

2.2.15 Recommendations and Presentation

Upon completion of the deterministic and sensitivity analysis, the results are presented to the DM and the associated organization. The analysis provides insight that serves to guide the decisions of the DM. It is important to note that the VFT process does not replace the DM. Values identified at the beginning of the process determine the ranking of alternatives according to those values. It may be that the process will require review and updating if the ranks do not appear logical to the consensus.

After reviewing the basics of DA and VFT, it will be appropriate to deliberate on the intricacies of state and nation building.

2.2 STABILITY, SECURITY, TRANSITION AND RECONSTRUCTION OPERATIONS (SSTRO)

“Success in any stability operation depends on weaving the various civilian and military lines of effort together like strands of rope. The campaign plan needs to ensure that all dimensions are brought into play: not only security but also the political, economic and humanitarian aspects. Peace support operations are a test of patience, understanding, and endurance perhaps the most difficult task is to establish the rule of law where none previously existed.”

General Sir Micheal Jackson

Chief of General Staff, British Army (2003-2006)

The first and foremost universally accepted principle, most famously asserted by John Locke one of the most influential Enlightenmentⁱⁱ thinkers, was that proper society and government exist to protect life, liberty and property. Individuals or groups with no security in their persons, possessions or basic liberties have no incentive to keep the peace or support government (Locke, 1773). Indeed, it can be argued that preservation of life, liberty and property was a basic Enlightenment definition of peace. Locke is supported by Hugo Grotius (Grotius, 1625) who says

First, individual citizens shall not only refrain from other citizens, but should furthermore protect them, both as a whole and as individuals; secondly, citizens should not only refrain from seizing one another’s possessions, whether these be held privately or in

common, but should furthermore contribute individually both that which is necessary to other individuals and that which is necessary to the whole.

In the same regard David Hume in his book “A treatise to Human Nature” 1739 wrote that

“It is therefore on opinion only that government is founded; and this maxim extends to the most despotic and military governments, as well as the most free and most popular.”

The Age of Enlightenment came to Europe in the 16 century, however Muslims, in their teaching, were contemplating on the human rights since the Prophet Muhammad (Peace be upon him) in the 7th century. The last sermon of the Prophet delivered on 9 Zil Hajj 632 Ad at Mount Arafat in Makkah during Hajjⁱⁱⁱ is often quoted as the a complete charter of human rights. While explaining the conduct of a Muslim to other Muslims, the prophet said:

“All mankind is from Adam and Eve, an Arab has no superiority over a non-Arab nor a non-Arab has any superiority over an Arab; also a white has no superiority over black nor a black has any superiority over white except by piety and good action. Learn that every Muslim is a brother to every Muslim and that the Muslims constitute one brotherhood. Nothing shall be legitimate to a Muslim which belongs to a fellow Muslim unless it was given freely and willingly. Do not, therefore, do injustice to yourselves. Remember, one day you will appear before God and answer your deeds. So beware, do not stray from the path of righteousness after I am gone.”

The life of Jesus and all the pious prophets of God since the creation of man have taught and preached noble social behavior. They all have emphasized a society where justice and equality forms the corner stone and peaceful coexistence is desired. However, diversity of human nature accounts for varying human social behaviors, different under different conditions, Sadly time and again history has borne witness to the beast inside the man who as an oppressor ensures brutality and wrath for sufferers. (Taliban, Milosevic, Saddam are a recent example). At the same time, when oppression becomes massive, people unite and strive for their basic rights, which, if escalated, lead to a civil war or revolution. Therefore, a peaceful society can only exist when both the government and masses fulfill their primary duties towards each other. This equilibrium, when disturbed by either side leads to turbulence and turmoil which if not controlled, can destabilize regions and generations. Such societies could remain isolated in the past, but with today's age of information, we face new challenges.

2.2.1 Effect of Information Technology on Societies

With the new information age, came a new world order. Today, War in Iraq is protested in Bonn Germany, and Israeli aggression is condemned outside the Capitol in Washington DC. Taliban brutality is criticized in London and Milosevic is questioned for his actions in Kosovo on the streets of Tokyo. In short, the world has become a global village and every government that exists must function in sync with the world order. The fourth Muslim Caliph Ali bin Abu Talib in his book "Nehaj ul Balagha: Peak of Eloquence" (Compilation Sharif Razi 10th Century) states that a society without justice cannot

survive. A stark commonality in Kosovo, Somalia, East Timor, Iraq and Afghanistan states that these societies were breeding injustice and the associated governments failed to protect the basic needs of people under their jurisdiction. President Bush made a similar mention in September 2002, when he asserted that the most formidable challenge to freedom and peace in the upcoming century will no longer involve large scale conflicts between rival nation- states; rather it is the ambitious and destructiveness of global terrorist organizations. He re affirmed that US will actively seek out and destroy these terrorist organizations regardless of their location (Bush, 2002:5). The suppression and injustice required the comity of world to take measures against these societies. The UN sponsored alliances and operations in the recent history are efforts to relieve people from their suffering.

2.2.2 Developed World's Response and Responsibilities towards Oppressive Regimes

Military operations were thus undertaken to topple these regimes, However stopping and pulling out at the point when the rogue regime is toppled, would mean bringing more chaos and anarchy to the system, as witnessed in Afghanistan after the Soviet pullout in 1990. Therefore, after a successful military operation, efforts in the areas of Security, Stability, Transition and Reconstruction are undertaken to alleviate irritants that impede the prosperity, security and peace of the world at large and the region and people in particular. The US military have termed the operations as Security, Stability, Transition and Reconstruction Operations (SSTRO).

2.2.3 United States and SSTRO

SSTROs date back to the history of warfare. Mostly, conquest in the world was followed by endeavors to rebuild and provide stability to the conquered land. It was a moral obligation of the conqueror to ensure protection for the conquered, set up a government that would enable security, peace and prosperity. If we take into account the United States role in nation building, we would find that the US engaged in such operations once in a decade during (Roland Paris, Understanding the contradictions of postwar statebuilding, 2009) the cold war whereas the UN embarked upon nation building once in 4 years during the same period. Since the end of Cold War, US military intervention has escalated to once every two years (Roland Paris, Understanding the contradictions of postwar statebuilding, 2009) whereas the UN numbers have jumped to once in six months. Not only has the frequency of such missions increased, but the associated time frame has also increased manifold as witnessed in Iraq, Afghanistan, and Kosovo. Table 1 (Roland Paris, 2009), depicts recent missions since the end of Cold War.

Interestingly, the character of these undertakings has also evolved. During the Cold War, UN troops were usually deployed to separate combatants, to police militarized zones and to monitor ceasefires. Recently these missions have expanded to reuniting divided societies, disarming adversaries, demobilizing former combatants, organizing elections, installing governments and promoting democratic reform and economic growth.

(Dobbins, 2007)

Major Peace Building Operations since 1989 Till 2009

Location	Duration of Military Component	Location	Duration of Military Component
Namibia	1989-1990	Kosovo	1999- Present (Barnett, 2004)
Nicaragua	1989-1992	Timor Leste	1999-2002
Angola	1991-1997	D R Congo	1999- Present
Cambodia	1991-1993	Afghanistan	2002- Present
El Salvador	1991-1995	Liberia	2003 – Present
Mozambique	1992-1994	Iraq	2003 – Present
Liberia	1992-1997	Burundi	2004 – Present
Rwanda	1993-1997	Ivory Coast	2004 – Present
Bosnia	1995- 2009	Sudan (Southern)	2005 – Present
Croatia	1995-1997	Sudan (Darfur)	2007 – Present
Guatemala	1997		

Table 5 Major Peace Building Operations (Roland Paris, 2009)

After going through a brief discourse on the need and usage of nation building through history, it will be logical to deliberate the intricacies of the whole nation building process. The first question that comes to mind is, where do we need such operations?

2.3 Need for SSTROs

2.3.1 Failing / Failed States

Dr Thomas Barnett, author of “The Pentagon's New Map: War and Peace in the Twenty-First Century: 2004” relates failing states to economic activity. He divides the world countries into groups based on economic progress. He states that:

The world can be roughly divided into two groups: the Functioning Core, characterized by economic interdependence, and the Non-Integrated Gap, characterized by unstable leadership and absence from international trade. The Core can be sub-divided into Old Core (North America, Western Europe, Japan, and Australia) and New Core (China, India, South Africa, Brazil, Argentina, Chile and Russia). The Disconnected Gap includes the Middle East, South Asia (except India), most of Africa, Southeast Asia, and northwest South America. Integration of the Gap countries into the global economy will provide opportunities for individuals living in the Gap to improve their lives, thereby presenting a desirable alternative to violence and terrorism.

He goes on further to define a failing / failed state as:

A state is ‘failing’ if it either cannot attract or build itself the connectivity associated with globalization’s progressive advance or if it essentially seeks to retard or deny the

development of such connectivity out of desire to maintain strict political control over its population.

Terrorist networks seek out the failed state for a host of reasons. This includes lack of governmental control over territories, lack of good governance, political turmoil and most authoritarian regimes that offer limited support to terrorist networks (Robbins, 2005).

Therefore the regions that are not connected to the global economy are the regions that are a threat to the capitalist world and will continue to be a threat to the world peace (Barnett, 2004). They are potentially failing or failed states that could become a safe haven for terrorist organizations and movements. Since these disconnected states pose a significant threat as, declared by George Bush in 2002, military intervention to overthrow such regimes and eradicate terrorist organizations was the reason behind interventions in Afghanistan and Iraq. As defined by DoD Directive 3000.05, such operations are *“Military and civilian activities conducted across the spectrum from peace to conflict to establish or maintain order in States and regions”*. (Department of Defense, 2005)

2.3.2 Security, Stability, Transition, Reconstruction Operations (SSTRO)

As the name suggests, these operations are necessary to secure and maintain peace in the aftermath of the conflict. Various factors shape the nature and magnitude of these operations; however the important overarching goals remain common in all SSTROs.

These goals are:-

- (a) Establishment of Security
- (b) Establishment of Law and Order
- (c) Maintenance/ Creation/ Reconstruction of Critical Infrastructure
- (d) Establishment of a credible^{iv} and effective indigenous government.

Thus, it will be pertinent to look at the objectives and framework of SSTR Operations as defined by various authors. James Dobbins in his book “A beginner’s Guide to Nation Building” (Dobbins, 2007), describes the nation building process under the following headings:

Planning

Military forces are quite adept at planning, however planning for nation building requires a military to take civilian components on board and execute a joint planning for the operation. The issues meriting immediate attention shall be:-

- (i) Mission’s Objectives
- (ii) Intended scale of commitment
- (iii) Institutional arrangement for managing the commitment

He professes that, after mitigating the reason for intrusion (to halt aggression, to stop genocide, to destroy weapons of mass destruction, and so forth) intervening authorities are left with a bigger task to refashion the society which requires meticulous pre planning.

Co – Option versus Deconstruction

Co-option is defined by Dobbins as an approach where intervening authorities try to work within existing institutions and impartially deal with all social forces and power centers. The other approach termed as Deconstruction, is where intervening authorities first dismantle an existing state apparatus and then build a new one. During this later process they consciously empower some elements of the society while disempowering the others. Historically UN peace keeping missions follow the first approach whereas US led interventions have often followed the second (Dobbins, 2007, p. xx) approach. The driving reason behind each approach is the mission objectives, (as bigger objectives are unlikely to be met with the Co- option strategy), Needs of troubled society, resources available with intervening forces also contribute to the choice of strategy.

Institutional Frameworks and Consultative Forums

Nation building missions generally involve a mix of national, multinational and international actors. The UN provides the most suitable institutional framework for most nation building missions, especially those associated with low cost structure, a comparatively high success rate, and the greatest degree of international legitimacy. In missions requiring invasions, NATO and similar alliances are required at least for the first two phases. Such alliances however, often lack the capacity for nation building and will always require UN and other national or international actors to provide civilian components that are essentials for nation building. Dobbins highlight the importance of

neighbors to such missions and stresses that neighbors must be engaged constructively even if their past actions were unhelpful.

Setting Priorities

The prime objective of nation building is to make violent societies peaceful, not to make poor ones prosperous. Dobbins, believe that first order priorities for any nation building mission are public security and humanitarian assistance. He ranks the priorities in the following order:-

- (i) Security
- (ii) Humanitarian Relief
- (iii) Governance
- (iv) Economic Stabilization
- (v) Democratization
- (vi) Development

Importantly, Dobbins suggests starting these in tandem where possible but emphasizes that starting development before working on governance is more likely to fail than succeed.

Seizing the Moment

The weeks immediately following the arrival of foreign troops are a time of maximum possibility. After the end of major combat operations, intervening forces need to seize

what is termed as the “Golden Hour” by Dobbins, through seamless execution of pre planned efforts towards nation building.

Soldiers and Police

A dignified and mature conduct by intervening soldiers goes a long way in establishing peace and isolating the belligerents. Initially the local population will have fears and reservations and will be hesitant to cooperate. However, professional approach by the soldiers during the execution of their mission and respect for local customs and religious beliefs is essential to shape public opinion to cooperate and achieve peace as quickly as possible.

In the same manner public security is the first responsibility of intervening authorities, Dobbins therefore suggests a gendarmerie^v- type units that combine military discipline with a high level of investigative, forensic, and intelligence collection skills. Typically the UN deploys one police officer for 10 soldiers (Crime, The Eighth UN Survey on Crime Trends and the Operations of Criminal Justice System, 2002); therefore, local police needs to be quickly vetted and closely supervised. In the medium term they need to be thoroughly reformed or replaced entirely. In the long term, they need to be mentored, supported and held accountable.

Rule of Law

The efforts to rebuild judiciary and correction systems are next after police reforms. In societies emerging from prolonged civil war, the legal system will likely have ceased to function. At the same time establishing balance between whom to forgive and whom to

punish could be challenging. War crime tribunals, Lustration^{vi} and truth commissions are means to bring about the Rule of Law. Dobbins, suggests incorporation of war crime tribunals and lustration in only those cases where the intervening authorities have the capacity to quickly enforce the outcome and deal effectively with the resulting resistance.

Humanitarian Relief

The humanitarian agencies are often working in intervened countries even before the foreign troops arrive. However, after the intervention, such agencies can only cooperate if a secure environment is established by the intervening forces. Dobbins, stresses the extreme care and coordination is required between the military and Non-Governmental Organizations (NGOs). In order to maintain impartiality, (and limit risky misunderstanding) humanitarian agencies want to limit their interaction with intervening forces. Thus a secure environment is essential where the relief work is carried out by professionals and military may not be compelled to take this role because of security void.

Governance

A conflict ridden society can wait for the democracy, but government is an immediate need after a conflict. The government ensures supply of basic amenities which are necessary to restore public order. Failure to provide facilities like water and electricity can have disastrous consequences for the peace restoration process. The intervening forces need to oversee the establishment of a legitimate government, which would

sustain itself once intervening forces leave, it is therefore essential that individuals(that form the legitimate local government) who are supported by intervening forces must be credible and impartial towards all groups and sects within the society.

Economic Stabilization

The intervening authorities need to ensure that inflation is kept under check; they need to strengthen or create a central bank, ministry of finance and civil service commission.

They need to keep a check on corruption since money often initially flows in abundance from outside donors. The intervening authorities often invite the World Bank, the International Monetary Fund, and United Nations Development Programme, among others, to assume the economic uplifting of the society, coordination of the donor effort and to keep the process efficient.

Democratization

In the context of nation building, the process of democratization is viewed as a mean of transferring wealth and power to peaceful hands from the violent hands. It is the ultimate objective of intervening forces to bring a peace that is sustainable; the whole process of intervention is undertaken to remove the threat to the region and the world. The intervening authorities must be cautious to the cultural requirements and must not force their own brand of democracy; such an effort is doomed to fail. A free, fair, and impartial elections conducted under the UN umbrella are the fastest means of democratizing a troubled region.

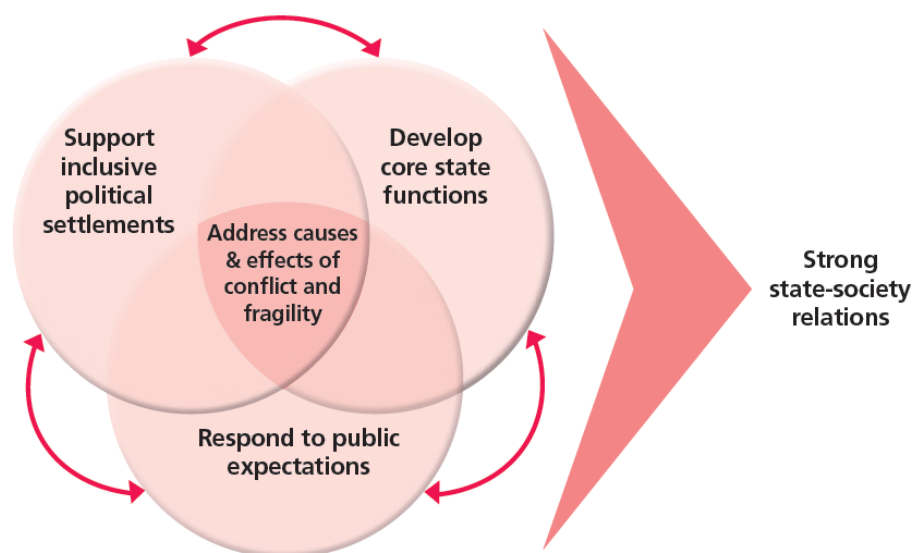
Infrastructure and Development

Dobbins stresses that post conflict nations have a larger growth potential than settled nations. The quality of policies adopted by the intervening authorities and the host government determines the volume of growth. He highlights that controlling inflation, financing the budget in the initial years, creating a tax system conducive to growth, reducing or eliminating subsidies, attracting investments and creating opportunities to utilize local resources is the key to sustained growth.

He stresses that the term “re construction” in terms of nation building does not mean rebuilding roads, homes and power plants destroyed during war. The most important thing is to reconstruct institutions and policies that would in turn bring a sustained growth and peace.

United Kingdom’s Agency for International Development’s (UKAID) Approach

UKAID is an agency mandated to support nation building across the globe. The Department for International Development (DFID) explains the integrated approach towards building peaceful states and societies in the Figure11.



The four key objectives are noted inside the circles and DFID believes that all these objectives are inter-linked and form a virtuous circle.

2.4.1 Key Aspects of Nation Building: Various Authors' Opinion

Following is an overview of the work of few authors on the subject:-

The Quest for Viable Peace (Jock Covey, Michael J. Dziedzic, and Leonard R Hawley: 2005)

After going through nation building strategies by Dobbins, let us review the other models available in nation building. "The Quest for Viable Peace" is a book written about the Kosovo Conflict by Jock Covey, Michael J. Dziedzic, and Leonard R Hawley.

They call stability operations as "Conflict Transformation" (Covey et al, 2005). The authors note that peace and stability are brought to a failed state through transformation of politics, security, rule of law and economy.

In his book Covey references UN Resolution 1244, which articulated the United Nations Interim Administration Mission in Kosovo (UNMIK) sub objectives to address the objective of politics. The two formal sub-objectives were to establish an interim civil administration and to make progress toward substantial autonomy and democratic self government. He makes it clear that guidance should be provided from some higher level source to legitimize objectives. The authors mention defeating military extremism as their second objective for Stability Operations in Kosovo. They tie the implementation of security with the development of law and order and military lines of operations (LOO) in

order to achieve this objective. The third objective is the institution of law and order. Talking specifically about Kosovo, the author mentions the responsibilities for KFOR and UNMIK in Kosovo. KFOR strived to ensure public safety and order and to support and coordinate international civil work. UNMIK tried to achieve civil law and order, local police services, interim law enforcement, protect and promote human rights, establish judiciary and penal systems, administer courts, prosecution services and prisons, basic civil administrative duties while trying to establish credibility, impartiality and professionalism in all the local organizations it was developing. All this seems to be in sync with Dobbins's approach for nation building. The economy was Covey's final objective which was subdivided into establishing macroeconomic fundamentals (currency, banking, and so forth) and second was the establishment of formal economy by bringing in healthy reforms in the existing system and reconstructing the infrastructure for humanitarian relief, basic services and utilities.

Beyond Declaring Victories and Coming Home (Max G Manwaring, Anthony James Joes : 2000)

In their effort, Manwaring and Joes discuss objectives of Stability Operations (SOPS) by compiling work of various authors that researched different aspects of establishing peace in a failed state (Joes, 2000). Some of these objectives are dependent on first establishing a legitimate state. The first objective is the establishment of law and order, which is deemed essential for recovery of a failed state. Detaining and trying enemies of state, regulation of civil life, restoration of local government by conducting elections and

granting privileged status and international authorization to intervening forces are the sub objectives that help restore law and order.

The second objective suggested is the isolation of belligerents, which they assert can be achieved by separating insurgents from civilian population, clearing and holding onto territory, barriers and fortifications and civilian resettlement areas (though it is a mean but not professed by the authors due to high probability of failure in achieving stability).

These are the physical means, the moral means are maintaining a legitimate government, ensuring military operation incur the least possible damage to the society and correct conduct towards civilians and prisoners by the intervening forces will help in isolating the belligerents. The third objective suggested is sustaining life, relieving sufferings and regenerating economy. The authors believe that pursuing these objectives will help in establishing peace and stability of the troubled region.

Winning the peace: an American strategy for post-conflict reconstruction (Robert Cameron Orr)

While reviewing SOPS, Robert Orr highlights four pillars of SOPS (Orr, Winning the peace: an American strategy for post-conflict reconstruction , 2004). He mentions security, governance, social and economic well being, and justice and reconciliation to be the critical ingredients of SOPS. The author mentions unity of effort, integration of security forces, disarmament, demobilization and reintegration of combatants, regional security and reconstruction of security installations, and information and intelligence as sub – objectives to achieve security. The objective of governance can be achieved by

initiating and supporting a process for constituting a credible local government, enhancing government capacities and involving locals during all these processes is the way to achieve self governance that is sustainable after the departure of intervening forces. Socio-economic well being is defined by six minimum stability conditions: establishing a legal regulatory framework that supports basic macroeconomic needs, managing the natural resource, engaging the private sector, jumpstarting international trade, establishing basic education services and fighting epidemics and providing immediate relief to masses. In order to achieve the objective of justice and reconciliation. Orr proposes effective, responsive and respectful law enforcement instruments; impartial, open, and accountable judicial system; fair constitution and body of law; human rights mechanisms, humane correction systems, and reconciliation mechanism for dealing with past abuses and grievances. These four pillars were used by US Department of State to coordinate post conflict strategy development (JFWC Doctrine Pam 7 2004, Department of State 2005a).

2.4.2 Department of Defense Directive 3000.05

Since the end of the Cold War, the United States has been increasingly involved in stabilization and reconstruction operations throughout the world. In many cases, the government has failed to rapidly and effectively respond when necessary (Buss, 2005 , volume 09-05). These failures occurred, in large part, because the U.S. Government was not fully prepared to execute these operations. This has resulted in the unnecessary loss of human life, increased damage to civilian infrastructure, and increased overall

stabilization and reconstruction costs. The U.S. Government's lack of preparedness in this area was most readily apparent after the fall of Baghdad (Buss, 2005 , volume 09-05). The early stabilization and reconstruction efforts in Iraq were met with sharp public criticism and are largely viewed as the catalyst for change in the U.S. Government's policy concerning how stabilization and reconstruction operations are conducted.

Within the Department of Defense (DOD), there have been three significant changes in the conduct of stabilization and reconstruction operations as mentioned in Government Accountability Office (GAO) report 07-549-Military Operations. First, DOD formalized a new stability operations policy that elevated stability operations to a core military mission on par with combat operations.' Second, DOD broadened its military planning guidance to more fully address pre-conflict and post-conflict operations.'" Third, DOD developed a new joint operating concept to serve as the basis for how the military will support future Stabilization, Security, Transition and Reconstruction (SSTR) operations. It would be pertinent to examine the DoD Directive 3000.05 issued on September 16, 2009. The salient features of this directive as quoted from Para 4 are:-

- (1) Stability missions are a core US military mission with importance equivalent to combat operations.
- (2) These missions need to be addressed and integrated across all DoD activities, this strategy requires new curriculum, doctrines and concept of operations to be evolved and practiced to conduct SSTROs which were never given such an importance before.

- (3) The directive calls for a coordinated inter - agency effort in US administration and requires military to support and supplement SSTROs led by other US agencies, foreign governments and security forces, international governmental organizations.
- (4) The military has to lead SSTROs to establish civil security and civil control, restore and provide essential services, repair and protect critical infrastructure, and deliver humanitarian assistance where required till it is feasible to transition lead responsibility to other U.S. Government agencies, foreign governments and security forces, or international governmental organizations.
- (5) It highlights the following areas in Para 4(d) to be of prime importance while conducting an SSTRO:-
- (a) Disarming, demobilizing, and reintegrating former belligerents into civil society.
 - (b) Rehabilitating former belligerents and units into legitimate security forces.
 - (c) Strengthening governance and the rule of law.
 - (d) Fostering economic stability and development.

SSTRO Objectives as Viewed by Various Authors and Agencies

Dobbins	Covey	Manwaring and Joes	Robert Orr	DoD Directive 3000.05	Common Proposed Objectives
Security	Moderating Political Conflict	Establishment of Law and Order	Security	Security	Establishment of Security
Humanitarian Relief	Defeating Military Extremists	Isolation of Belligerents	Governance and Participation	Local Governance structures	Establishment of Law and Order
Governance	Institutionalizing Rule of Law	Sustaining Life, Relieving suffering, and Regenerating Economy	Social and Economic well - being	Promoting bottom – up economic activity	Maintenance/ Repair / Creation of Critical Infrastructure
Economic Stabilization	Developing Legitimate Political Economy		Justice and Reconciliation	Rebuilding Infrastructure	Establishment of Credible and Effective Indigenous government
Democratization				Building Indigenous capacity for such tasks	
Development					

Table 6 Consolidated SSTRO Objectives

2.4.3 The Importance of SSTRO in US Policy

After DoD Directive 3000.05, SSTROs gained a new importance in US military and political history. It is now considered a mission at par with combat mission and carrying these Operations in a cost efficient and effective manner is linked to the political victory and credibility of US both internally and in the comity of nations. Dr Richard F Deckro (Deckro, 2008) in his paper on the subject highlights the importance of SSTROs by referencing voice of Ray in the Field of Dreams, he mentions that we would like to believe as we conduct SSTRO that “If we build it, they will come”, whereby it he means a nations people enjoying a self sustaining peace. He stresses that success in SSTR Operations will only be possible, however, if cultural, behavioral and human considerations are considered and catered to during all the phases of SSTR Operations. This leads us to another important aspect of SSTRO, which is decision making while adhering to all of criteria and constraints. Decision Analysis techniques like Value Focused Thinking (VFT) and Multi Criteria Decision Making therefore offer optimum solution to a Decision Maker facing such decision situations.

Decision Analysis and SSTRO

Decision Analysis (DA) offers a great deal of promise for the SSTR Operations. In every nation building effort, there are quite a number of decision situations. The reactive approach of Alternative focused thinking, may not offer the optimum solution. Keeney (Keeney R. , 1996) in his book “Value Focused Thinking” (VFT) introduces a technique where a Decision Maker (DM), identifies what is the ideal solution in his opinion, and

instead of choosing between the alternates available, the DM defines his values. VFT provides far greater insight for strategic decision making by helping DM define trade-offs between competing and conflicting objectives. It is also an effective method to make decisions involving uncertainties, uncertainties that are always confronted by DM in SSTR Operations.

Kirkwood suggests building of a Value Hierarchy (VH) that according to him is a guide to collect information, identify alternatives, facilitate communications and evaluate alternatives. (Kirkwood C. , 1997). VH provides a structured evaluation of alternatives, providing an ordinal ranking of alternatives from best to worst.

The VFT approach for SSTRO is a technique relatively new for SSTR Operations. The literature search for this aspect came up with the work of G .D Fensterer in 2007, which used Value Focused Thinking to Plan and Assess Stability Operations (Fensterer, 2007). The lack of use for VFT can be attributed to a relatively short period of time since its inception, however with SSTRO in Afghanistan and Iraq not being an overwhelming success, this approach is likely to ensure better communication and results for all stake holders involved in SSTR Operations.

SSTRO, have taken a new importance in recent history as recognized by the US DoD through their Directive 3000.05. SSTRO, are essential to promote sustainable peace. At the same time, intervening forces must keep in mind the cultural, religious, and regional customs and practices in mind and shall be able to take onboard all the stake holders. It is worth re emphasizing that SSTRO operation will have different VH for different regions

and cultures. Thus a model that proved to work well in Africa is likely to prove disastrous in Iraq if not tailored to suit the values, culture and customs of the Iraqi population. While the essence of SSTRO will remain the same, small subtle changes in the VH, identified through a DA technique like VFT is likely to fetch better and prosperous results for all stake holders while conducting SSTRO.

III. Methodology

This chapter discusses the first five steps of the eight-step VFT process. The last three steps are included in the analysis and recommendation sections of this research. This chapter applies VFT to create a value hierarchy for SSTRO Operations in Afghanistan. The Decision Maker (DM) as mentioned in Chapter 1 is a Pakistani Military Diplomat of Pashtun background. He possesses a firm knowledge of the culture and norms of Afghanistan and has keenly followed the events in Afghanistan and North Western Pakistan during a distinguished military career. The DM was interviewed on a number of occasions and his values for SSTRO in Afghanistan were ascertained. It is pertinent to mention that extreme care was taken to replicate the values of a common Afghani person as realistically as possible. After ascertaining the values, a value hierarchy was constructed and evaluated based on the desired characteristics of VFT. Attributes and notional value functions are then created to assess the level of attainment of measurable sub – objectives. Finally, a notional weighting scheme is added to the value hierarchy.

3.1 VFT Steps

3.1.1 Problem definition

The first step towards solving any problem is to acknowledge its existence and then identifying it. In the case of Afghanistan, the fact that nearly 10 years of SSTRO efforts

have fallen short of everyone's expectations is a testimony to the existence of the problem. There have been a number of statements by both Afghani and US leadership that confirm that results sought after in Afghanistan, fell short of expectations. The common perception amongst the masses in Afghanistan in particular, and the Muslim world in general, is that US efforts in the region lacked a clear understanding of the values and religious /cultural preferences of Afghani people. With this aim in mind, this thesis makes an effort to identify the values that are important to Afghani masses. Pursuing them in SSTRO will bring results that are more beneficial and acceptable to all the stake holders. Therefore the logical course of action as suggested by this thesis is to identify and the values that are of significance to Afghani masses.

3.1.2 Objectives and Values

While reviewing literature for this research project, opinions of many subject matter experts and US DoD Directive 3000.05 were reviewed. DoD directive 3000.05 is considered a Gold Standard document in SSTR Operations for US forces. Paragraph 4.2 of the Directive states:

Stability Operations are conducted to help establish order that advances U.S interests and values. The immediate goal often is to provide the local populace with security, restore essential services, and meet humanitarian needs. The long – term goal is to develop indigenous capacity for securing essential services, a viable market economy, rule of law, democratic institutions, and a robust civil society. (U.S Department of Defense 2005:2)

Although the directive does not specifically list values, the following objectives can be identified;

- (a) Establish order
- (b) Advance US interests and values
- (c) Security
- (d) Essential Services
- (e) Humanitarian needs
- (f) Viable market economy
- (g) Rule of law
- (h) Democratic Institutions
- (i) Robust civil society

In Paragraphs 4.3 and 4.5 of the same directive, some means for achieving the fundamental objectives are also mentioned. The following objectives can be identified from the above mentioned paragraphs:

- (a) Rebuild indigenous institutions
- (b) Rebuild security forces
- (c) Rebuild correctional facilities
- (d) Rebuild Judicial systems
- (e) Secure and stabilize environment
- (f) Revive or build private sector
- (g) Encourage citizen driven economy

- (h) Construct necessary infra structure
- (i) Develop governmental institutions
- (j) Ensure security
- (k) Develop local governance structures
- (l) Rebuild infrastructure

After going through all these objectives and means objectives, the final value list was narrowed down to five objectives; these objectives engulf as the stated objectives of Directive 3000.05 and can be termed as values. The key values as understood from Directive 3000.05 are:

- (a) Security
- (b) Social well- being
- (c) Governance
- (d) Economy
- (e) Rule of law

Similarly, the values from other subject matter experts and authors in the field were also determined as discussed in Chapter 2 and a consolidated table is placed in Table 6.

SSTRO Objectives as Viewed by Various Authors and Agencies

Dobbins	Covey	Manwaring and Joes	Robert Orr	DoD Directive 3000.05	Common Proposed Objectives
Security	Moderating Political Conflict	Establishment of Law and Order	Security	Security	Establishment of Security
Humanitarian Relief	Defeating Military Extremists	Isolation of Belligerents	Governance and Participation	Local Governance structures	Establishment of Law and Order
Governance	Institutionalizing Rule of Law	Sustaining Life, Relieving suffering, and Regenerating Economy	Social and Economic well - being	Promoting bottom – up economic activity	Maintenance/ Repair / Creation of Critical Infrastructure
Economic Stabilization	Developing Legitimate Political Economy		Justice and Reconciliation	Rebuilding Infrastructure	Establishment of Credible and Effective Indigenous government
Democratization				Building Indigenous capacity for such tasks	
Development					

Table 7 SSTRO Objectives

The review of the objectives in Table 6 gives an insight to the international understanding on SSTRO Operations. Keeping these objectives in mind, an effort was made to determine the values that are important to Afghani masses since, owing to the mistrust existing between US and the Muslim World, every action from the US is viewed

with skepticism. Therefore, it was deemed essential to state the following assumptions for this thesis.

Assumptions

It is assumed for the purposes of this thesis that,

- (a) The sole objective of all stake holders in Afghanistan is to bring stable and self sustaining peace.
- (b) US and ISAF presence in Afghanistan is temporary, a time table for a phased withdrawal is accepted by all the stake holders.
- (c) International donors will help in reviving Afghanistan till it can stand on her own feet.

The next step after problem identification is to determine the values that are important to our DM. The values were determined after a series of exclusive interviews.

3.1.3 Determining the Values

It is important to keep the cultural differences between the modern world and Afghanistan in mind in order to better understand these values. In addition, the problems that have plagued a common Afghani are far different to the problems that a US or a Western citizen faces. With this in mind, the following values were identified by the DM.

- (a) **Justice** Justice, appears to be the root cause of a common Afghani's problem. Owing to the non existence of an effective legal system and the massive corruption

present right across the country, the state unfortunately follows the Might is Right principle in many areas. The past 30 years have left a physical and emotional scar on Afghanistan and its people. The country has experienced disappearances, torture, mass executions, ethnic persecution, internal displacement and the mass migration of Afghans to Pakistan, Iran and elsewhere. Almost every Afghan has a story of struggle, suffering and loss to tell¹. How do people deal with these legacies in order to move forward and achieve genuine and long-lasting peace? This question becomes more complex and contentious in an environment where armed conflict and human rights violations continue. Government institutions are weak and lack credibility and legitimacy; sadly the alleged perpetrators of some of the ongoing crimes are among the political elite. Despite the scale and length of the violence, there has been no accountability for past crimes in Afghanistan between any of the phases of war². Since the signing of the Bonn Agreement in 2001, no concerted efforts have been made by the Afghan government (GoA) to implement a process of transitional justice. There has been limited action to address the culture of impunity in Afghanistan; alleged perpetrators of some of the worst human rights abuses have retained positions of power (Mani, 2003). Under all such circumstances, it is but natural that Justice, which occupies such a corner

¹ During the nationwide consultations conducted by the Afghanistan Independent Human Rights Commission (AIHRC), nearly 70% of those interviewed said they or their immediate families had been direct victims of serious human rights violations during war. Afghanistan Independent Human Rights Commission, A Call for Justice: National Consultation on Past Human Rights Violations in Afghanistan, (Kabul: AIHRC, 2005), 4. The report can be downloaded at: http://www.aihrc.org.af/rep_Eng_29_01_05.htm (accessed 08 January 2011).

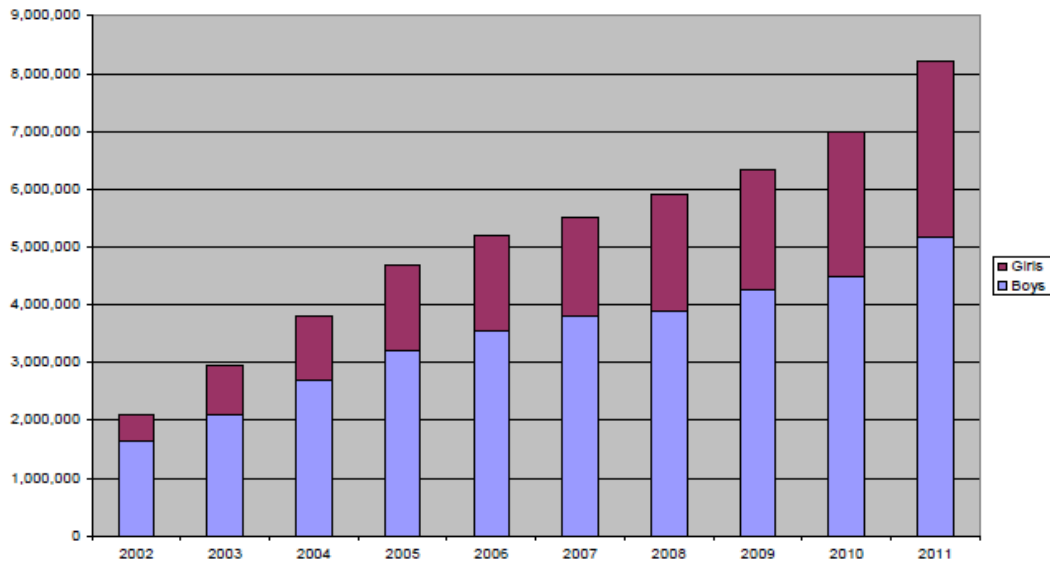
² Sippi Azarbaijanni Moghaddam, "On Living With Negative Peace and a Half-Built State: Gender and Human Rights," International Peacekeeping 14, no. 1 (2007): 133-4.

place in Muslim society, is termed as one of the key values in order to bring lasting and self sustaining peace in Pakistan.

(b) **Education** Afghanistan, presents a multitude of challenges in the field of education. Development in this field has definitely shown positive trends in the post Taliban era as depicted in the Figure 12. However, education still remains a core problem in Afghanistan. April 2009 estimates reveal that at least 500,000 children in the Southern provinces cannot join schools due to security concerns (Ian S Livingston, 2011). Education is also seen by the insurgents as the biggest threat, as they believe that there recruitment will decline if children choose to go to school. Therefore it is no surprise that they have burnt at least 238 schools, terrorized teaching staff and parents that resulted in the loss of 290 lives and the closure of more than 650 schools (Ian S Livingston, 2011). These acts are contrary to principles of Islam since the first message delivered to Prophet Muhammad was “ Iqra” which means read.

“Read! In the Name of your Lord, Who has created (all that exists), Has created man from a clot (a piece of thick coagulated blood). Read! And your Lord is the Most Generous, Who has taught (the writing) by the pen. Has taught man that which he knew not”. (Al Quran : 96:1 to 96:5)

Estimated Annual Enrollment in Elementary and Secondary Education



NOTE: It is estimated that in 2001 less than 1 million students were enrolled in primary/secondary education, virtually none of them girls.

Figure 12 Estimated Annual Enrollment in Elementary and Secondary Education (Ian S Livingston, 2011)

It is the lack of education that has helped Taliban recruit a number of youth into militancy. The DM identified that owing to the lack of education, Afghani youth do not understand the true spirit of Islam which is of embracing peace and shunning militancy. In order to develop an Afghan society which is not narrow minded and short sighted like the Taliban, it is important to educate the masses through a dedicated and intensive program at all levels to develop a peaceful and tolerant society. It is not surprising to find the linkages between security and literacy, a recent US reports for Congress states:

Much of the deficiency throughout the Afghan National Security Forces (ANSF) is due to illiteracy, which is estimated at about 90%. That has prompted NATO Training Mission – Afghanistan (NTM-A) to increasingly focus on providing literacy training, which is also seen as a large driver of

recruits who want the literacy education. The October 2011 DOD report says there were 89,000 Afghan soldiers and police undergoing literacy training as of September 2011. (Katzman, 2011)

(c) Creating Jobs and Economic Uplift

Experts have long believed that accelerating economic development would do more to improve the security situation than other policy components, and that economic development is widely considered pivotal to Afghanistan's ability to shape its future after the bulk of international forces depart and donors presumably wind down their financial as well as military involvement. With about 80% of Afghans living in rural areas, the agriculture sector has always been key to Afghanistan's economy and stability. The late Ambassador Holbrooke, in his January 2010 strategy document, outlined U.S. policy to boost Afghanistan's agriculture sector not only to reduce drug production but also as an engine of economic growth (Katzman, 2011). Per capita income in Afghanistan has risen to \$335 in 2006 as compared to \$180 in 2001. But, these developments are marred by the significant rise in opium production. This has made the heroin trade Afghanistan's biggest industry, accounting for about a third of the nation's economy (Afghanistan Opium Survey 2011 Winter Rapid Assessment, 2011). The United Nations estimates that 92% of the world's heroin supply comes from Afghanistan (World Drug Report, 2007). The latest U.N. Annual Opium Survey for Afghanistan showed the area under poppy cultivation in the country to be 164,990 hectares in 2006—104,000 more than in 2005. An unprecedented 6,100 tons of opium has been harvested, making

Afghanistan virtually the sole supplier of the world³. The U.S. government has spent more than \$300 million in the past two years on trying to develop alternative livelihoods for Afghan farmers, but a poppy crop earns 10 times the money than can be earned by traditional wheat crops and about seven times what fruit orchards can generate (see Table 8).

Prices of Dry Opium and Food Grains

	Price US Dollar / Kilogram		
Product	ORAS 2009	ORAS 2010	% Change
Dry Opium	85.16	80.23	-6 %
Fresh Opium	61.74	53.66	-13%
Wheat	0.6	0.34	-43%
Rice	1.12	1.03	-8%
Maize	0.42	0.26	-38%

Table 8 Prices of Dry Opium and Food Grains(UNODC, ORAS2010)

Thus, an effective approach to controlling opium poppy cultivation must include incentives along with strong disincentives to stop growing the crop. An estimated 2.9 million people, or 12.6% of the population, were involved in the cultivation of opium in 2006, up from two million in 2005.

³ “Afghanistan Opium Survey 2006 Executive Summary,” ReliefWeb, _ <http://www.reliefweb.int> _ , September 12, 2006

Members of the business community within Afghanistan also face significant problems in their desired financial ventures, which would promote increased economic development. They have pointed out that a paucity of electricity, a 2009 survey states that only 15% homes in urban and 6% homes in rural Afghanistan have access to electricity (Office of the Special Inspector General for Afghanistan Reconstruction, 2011), the lack of legal structures, insufficient access to land and capital, too few decent roads, high levels of corruption and taxes, and a poorly trained labor force are major obstacles in their desire to help rebuild and develop the country through increased capital investment.

The DM stated that creating jobs and concentrating efforts on the economic uplift, both in Agricultural and Industrial sectors is a measure that will help in SSTRO. He believes that years of fighting and lawlessness has frustrated and tired people. If they have a job and a stable source of earning, many of them will put away thier arms and will actually withdraw their support for militants.

(d) **Security** Security remains an essential for peace to be stable and self sustaining in Afghanistan. However, the DM believes that Afghani people will value and look up to local forces rather than ISAF or NATO troops. He stresses that an interim solution could be to deploy troops from Muslim countries that will be viewed with a different context, much softer than the one opined for ISAF and NATO troops.

Troops Committed to International Security Assistance Force (October 2011)

	Albania	286		Germany	5,000		Poland	2,580
	Armenia	126		Greece	153		Portugal	140
	Australia	1,550		Hungary	415		Romania	1,873
	Austria	3		Iceland	4		Singapore	39
	Azerbaijan	94		Ireland	7		Slovakia	309
	Belgium	520		Italy	3,952		Slovenia	77
	Bosnia & Herzegovina	55		Jordan	0		Spain	1,526
	Bulgaria	597		Republic of Korea	350		Sweden	500
	Canada*	529		Latvia	174		The former Yugoslav Republic of Macedonia**	163
	Croatia	317		Lithuania	236		Tonga	55
	Czech Republic	623		Luxembourg	11		Turkey	1,840
	Denmark	750		Malaysia	46		Ukraine	23
	El Salvador	24		Mongolia	114		United Arab Emirates	35
	Estonia	159		Montenegro	39		United Kingdom	9,500
	Finland	156		Netherlands	183		United States	90,000
	France	3,932		New Zealand	188			
	Georgia	937		Norway	429		Total	130,638

Figure 13 Troops Committed to ISAF as of 20 Oct 2010 (Afghanistan Index 2011, Brookings Institute)

(e) **Social Well - Being** On the social front, the world and particularly Western media has highlighted the “liberation” of Afghan women. There are currently 68 women in parliament, among the highest numbers globally, more female judges, and an increase in the enrollment of girls in schools. Women’s participation in fashion shows and beauty pageants is seen as being a positive development in terms of the “liberation” of women. On the flip side, the situation for Afghan women in general has not improved much, particularly outside the capital (Ghufran, 2007). One of the most outspoken female members of parliament, Malalia Joya, has received death threats for vocally condemning the warlords and former Taliban sitting in the institution.

Today, the culture gap between the cities and the villages is as vast as ever, and is, in fact, growing. In Kabul, modern buildings have sprouted up alongside private TV channels, shopping malls, and Chinese, Thai, and Italian restaurants. Many young, urban Afghans have embraced international fashion, music, and movies from Europe and Asia. In contrast, villages away from the city usually have mud-brick dwellings without electricity or running water. In these areas, women are often discouraged from setting foot outside the home. These stark contrasts have made many locals in rural areas furious at the pace of development in Kabul in contrast to their own areas. For their part, religious conservatives say the cities are importing foreign, un-Islamic culture. Figure 14 highlights the poverty levels as of 2007. Interesting to note is the threshold of poverty line, which is an income of more than 14 US Dollars.

% Population Living Below the Poverty Line*	% Population Living Slightly Above the Poverty Line	% Population Experiencing Food Poverty^
42%	20%	45%

*Defined as living on a monthly income of US \$14/month or less

^Those unable to purchase sufficient food to guarantee world standard minimum food intake of 2,100 calories/day

Figure 14 Poverty Levels in Afghanistan (Afghanistan, 2007)

Like all other values available, the DM identifies social well being as important to Afghanistan. However, he stresses that comparing an Afghan society with a first world society would be wrong. Amenities that are so essential in the western world have never been introduced in Afghanistan, while basic and emergency health services are essential, the lack of skilled workers to keep such institutions effective and working efficiently makes their introduction questionable. The DM places social well being last

on his value list and believes that working on other values will automatically improve this aspect in the long run.

After ascertaining the five important values that are depicted in Figure15, it would be pertinent to view the means important to DM for achieving these values.

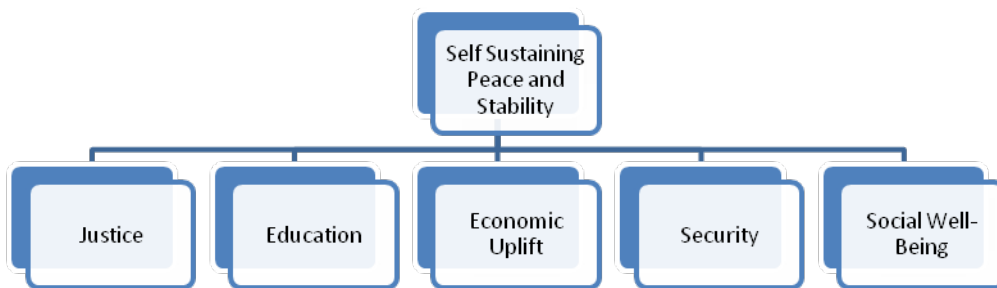


Figure 15 Value Hierarchy First Tier

Defining the Values and Means to achieve them

In order to understand clearly why this thesis is different from similar efforts published on the subject, it is essential to explain the values and their importance to Afghani masses.

Islam as a religion has strong influence in life of a common Afghani Muslim. Since Islam, in its true spirit is not just a religion but also a code of life, Muslims believe that guidance in every aspect of life can be taken from Islam. Justice holds a corner place in Islamic teachings. Quran, the Holiest book for the Muslims “The Quran”, the sacred scripture of Islam, considers justice to be a supreme virtue. It is a basic objective of

Islam to the degree that it stands next in order of priority to belief in God's exclusive right to worship (*Tawheed*) and the truth of Muhammad's prophethood. God declares in the Quran:

"God commands justice and fair dealing..." (Quran 16:90)

And in another passage:

"O you who believe, be upright for God, and (be) bearers of witness with justice!..." (Quran 5:8)

Therefore, one may conclude that justice is an obligation of Islam and injustice is forbidden. The centrality of justice to the Quranic value system is displayed by the following verse:

"We sent Our Messengers with clear signs and sent down with them the Book and the Measure in order to establish justice among the people..." (Quran 57:25)

However, despite being a Muslim country where Islamic Law and Quran find much respect, they still do not have the final word (Fearon, 2010). The preferred source amongst the doctrinal sources appears to be Pashtunwali, but this can vary from case to case, district to district, so it is better to view the decision-making process as through a prism walled by Pashtunwali, Islam, local tradition and the formal justice sector. It will be pertinent to look at the present sources of Justice (both official and unofficial) available to a common Afghani. These are

1. The Afghan Government formal judicial system (judges, prosecutors & other MOJ staff)

2. Afghan Government officials (usually District Governor [DG] and District Chief of Police [DCOP])
3. The Elders
4. The Taliban
5. The Mullahs

Not only do these five justice providers regularly engage in dispute resolution by themselves, but also it is more common than not to find combinations of these five involved in any given dispute. The mullahs in particular play at least an advisory role in many disputes resolved principally by all the other providers. For example, a group of village elders may ask for the assistance of the District Governor, or the DG may refer a case to the elders, or ask for the opinion of the Mullahs; or, the local prosecutor may refer a case to the local Elders and vice versa. For the most part the solution lies in 'whatever works'. It is an a la carte approach to justice, with direction being drawn from Islam, from Pashtunwali, and from simply whoever is around. The Taliban is the only group that works alone, without reference to the others although they also retain their own Mullahs to give their decisions an Islamic blessing. This suggests three things:

1. That for Afghans, being on the winning side is an essential survival tool
2. That justice provision is inextricably linked with local power structures
3. That pragmatism is a key driver in dispensing justice

The DM feels that Policing and Justice are the key requirements from the community. They are thus key government service deliverables. Since they are two services also offered by the Taliban, delivery on these two areas is the key battleground to secure territory (physically, politically and psychologically) for both the Government and the

Taliban. Therefore, any progress that can be made on these two issues will assist the Counter Insurgency effort and bring peace and stability to the region. Because there are so many providers, strengthening those linked with the Government (either formal or informal) will increase choice, and, further, increase the quality of those choices, to the detriment of the Taliban. The more the ability to really choose increased, the less likely people will be to choose Taliban, because the only reason people go to them, is for swiftness and quick disposal of their grievances. Figure 16 highlights the attributes and means to achieve his objectives in delivering Justice to Afghani people, as viewed by the DM.

Accountability, in the eyes of DM is extremely important to establish the credibility of the government. He stressed that today people do not have faith in the Government because of the massive corruption at all levels and the absence of a strong and credible judiciary means that custodians of public money are looting the resources without any check and balance. Therefore, an accountability system must be established which addresses all appeals in a swift and transparent manner.

The DM outlines his views on reviving the judicial system in Afghanistan, where Defining the Law to be followed uniformly across the country, establishing courts that cater to the needs of the people and training the court personnel are listed as key areas to revive the judicial system. The success in these areas can be measured through deciding the number of courts presently available in a developed country like Malaysia and comparing the ratio available in Afghanistan. Similarly, the number of personnel

available at such courts can be compared in a similar manner. In order to measure the implementation of the same law right across the country, data can be collected and an attribute can be defined to grade success in this field.

Justice Value

Hierarchy

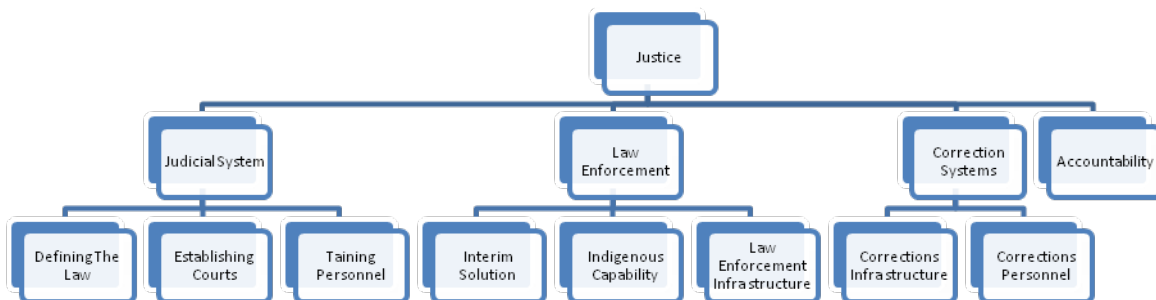


Figure 16 Justice Value Hierarchy

In order to better understand the reasoning behind choosing these values, the DM's perspective on values and objectives is explained.

Judicial System

Currently, Afghanistan does not have a uniform legal system. Serious human rights abuses continue to occur on a regular basis and many of the perpetrators remain outside the reach of Afghanistan's transitional government under President Karzai. The legal reality is marked by impunity: not only do past grave violations of human rights remain unpunished but such abuses are continuing without any immediate prospect for

a legal system capable of bringing the perpetrators to justice. Therefore, to address the grievances of people and ensure security and stability, a legal system is an absolute must at the earliest. The DM believes that according to the Bonn Agreement, the courts need to follow the 1964 Constitution of Afghanistan. However, as mentioned in a UNHCR report on Afghanistan's Legal System and its Compatibility with International Human Rights Standards (Lau, 2002) , the practice by courts is totally in contrast as to what was agreed in Bonn; the state laws are only applied in Kabul and Mazar e Sharif.

The report mentions

“The contrast between the requirements to be met by Afghanistan’s legal system under the provisions of the Bonn Agreement and the legal reality as it pertains in the country can only be described as dramatic: whereas the provisions of the 1964 Constitution and Afghanistan’s international legal obligations can be ascertained without any difficulty, the same does not apply to the existing laws and regulations. The latter have to a large extent physically disappeared and can only be located in foreign libraries and collections. Thus both the Interim Administration and the Transitional Government, which took control over the affairs of the state in June 2002, having been elected by an Emergency Loya Jirgah, are faced with the impossible task of enforcing a legal system that within Afghanistan does not even exist on paper”.

At the same time, even if the 1964 constitution is implemented, the human rights standards mentioned there fall short of meeting International standards (Lau, 2002). Therefore, the DM feels the needs to redefine the Judicial laws in Afghanistan. The next logical steps to revive the judicial system are establishing and reviving courts at the district level and manning them adequately with professionally trained people. It is appropriate to comment that a large number of Afghans do not believe in fairness of the Governmental Judicial system and would like Jirgas to administer justice to them. A fact

supported by a survey poll of 6200 Afghans in 2007. The answers refer to a hypothetical situations and not actual events. The survey results are displayed in Figure 17.

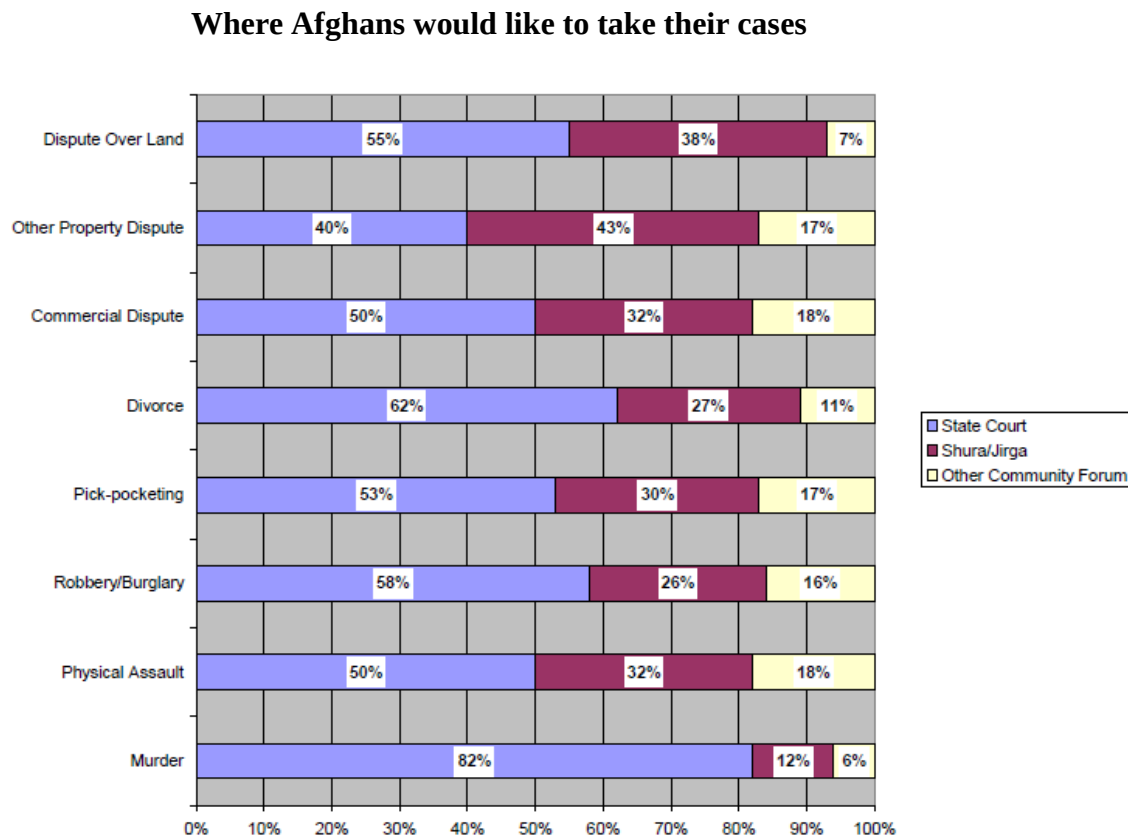


Figure 17 Where Afghans would like to take their cases? (Development, 2007)

Law Enforcement

The DM feels that at present, Afghani administration lacks the capability to enforce laws uniformly across Afghanistan. The solution acceptable to a common Afghani would be local law enforcing agencies. Since that may take time, DM proposes an interim solution where Law enforcement personnel are deployed from a Muslim country. This would be far from ideal but is likely to create less ripples in masses. Insurgents have managed to portray ISAF as a Christian force; a fact that was not helped by President George Bush's

coining Operation Enduring Freedom as a Crusade during his remark at West Lawn of White House on 16 September, 2001. However, indigenous capability to enforce state law is the ultimate sub objective for the DM. The Infra structure, that includes police station, equipment and training, is the next event on the DM's list.

Corrections System

Developing a corrections system, where criminals are molded into law-abiding citizens is absolutely essential in Afghanistan. The private prisons owned by various warlords need to be abolished, new state run prisons must be developed and internationally accepted human rights must be practiced in such correction facilities. Adequate training and staffing is the way to develop this objective in prosperous and stable Afghanistan.

Accountability

In a Congressional Research Service Report (CRS) titled Afghanistan: Post Taliban Governance, Security and US Policy, the author Kenneth Katzman states:-

“No matter how expansively the U.S. mission has been defined, building the capacity of and reforming Afghan governance particularly reducing governmental corruption have been consistently and widely judged to be key to the success of U.S. policy. This has been stated explicitly in each Obama Administration policy review, strategy statement, and report on progress in Afghanistan, as well as all major international conferences on Afghanistan, including the major conference in Bonn on December 5, 2011”. (Katzman, 2011)

Accountability is an aspect that merits immediate attention in Afghanistan. There are massive corruption allegations against the Government of Afghanistan. Transparency

International's Annual Corruption Perception Index (CPI), tells the sorry state of affairs in Afghanistan.

Transparency International's Annual Corruption Perception Index (CPI)

YEAR	RANK	NUMBER OF COUNTRIES SURVEYED
2010	176 (T)	178
2009	179	180
2008	176	180
2007	172 (T)	180
2006	NO DATA	163
2005	117 (T)	159

Figure 18 Transparency International's Annual Corruption Perception Index (CPI) (T indicates tied position) (International, 2011)

A common Afghani has to pay a bribe for his legal rights too. Such practices are the key in dissuading people away from peace and cooperation. The emergence of Taliban and their initial support by the masses was an outcome of similar corrupt practices. According to a host of Afghanis surveyed after the post Taliban era, they were categorical in saying that though Taliban punishments were barbaric and harsh, at least they addressed issues and served Justice which was right according to them. Therefore, in order to develop credibility for the government, it is essential that a separate institution be established that addresses people's grievances and complaints against corrupt practices in a swift and efficient manner. This institution must have the jurisdiction to hold each and every Afghani citizen accountable for actions done against the state law. A recent survey shown in Figure 19 highlights the public opinion regarding corrupt practices amongst the government officials.

Question: How Much of A Problem Is the Issue of Corruption among Government Officials or the Police in this Area?

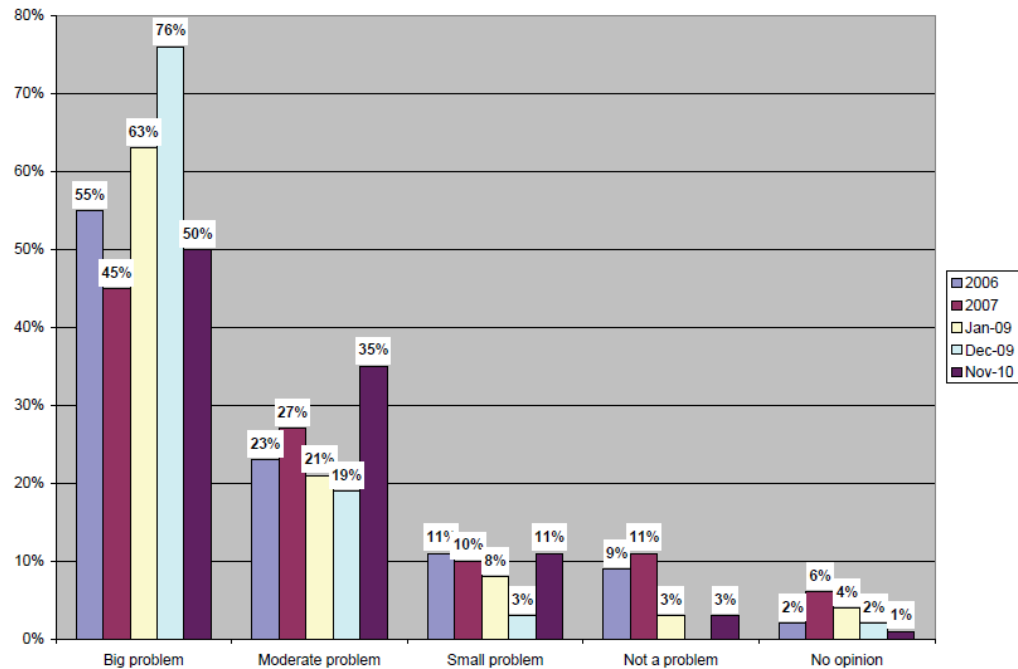


Figure 19 Problem of Corruption (Ian S Livingston, 2011)

Similarly, the DM explained his views and weights about every aspect of the value hierarchy. His insights and scoring beliefs and the reasons for choosing a particular measure were noted down. A detailed explanation of each of them is attached as Appendix A to this document.

The hierarchy developed in consultation with the DM regarding security for Afghans is displayed in Figure 20.

Security Hierarchy

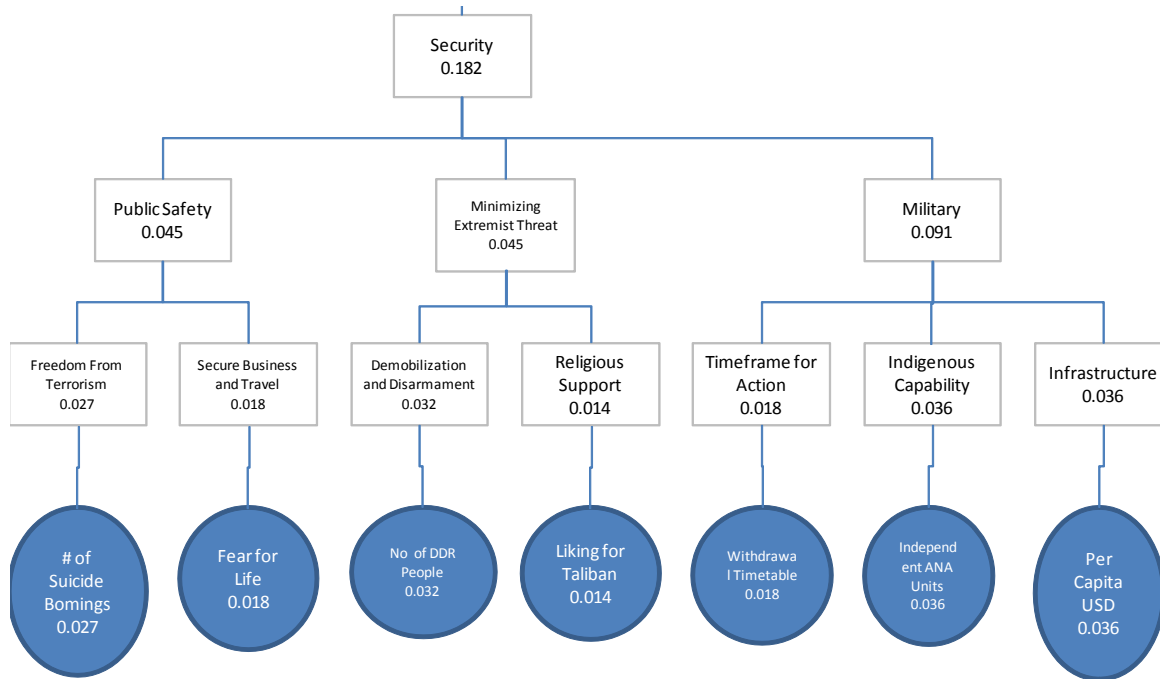


Figure 20 Security Hierarchy with Global Weights

The Security was given a weight of 0.182 by the DM, making it equal to education and twice as important as social well-being. The next tiers of Public safety, Minimizing extremist threat and Military were allocated weights of 0.045, 0.045 and 0.091 respectively out of the total security weight of 0.182.

Public Safety

Public safety was subdivided into freedom from terrorism, secure business and safe travel. It is worth mentioning that according to the DM, instead of freedom from terrorism, non combatant casualties in Afghanistan was a better measure to gauge public safety, however non availability of data in this regard prevented this measure to

be selected. The DM was satisfied with the selection of number of suicide bombings as an alternate measure to judge public safety. It will be pertinent to discuss the measures and the SDVF for these attributes separately.

Freedom from Terrorism The number of suicide bombing conducted in Afghanistan was chosen as an appropriate measure to represent freedom from terrorism. The DM suggested that the present number of suicide bombing in Afghanistan during 2009 was 180 which was exceptionally high compared to 129 bombing during the year 2007. Therefore, he suggested that reducing these bombing to zero shall fetch the perfect score of 1. The DM, mentioned that anytime the number of suicide bombing were increased beyond 135, it shall be scored as zero. He also suggested that in his opinion reducing the number to 18 will have a value of 50% or 0.5 in terms of freedom from terrorism for the Afghani people. The graph displaying an exponential curve representing the SDVF for suicide bombings is displayed in figure 21.

Secure Business and Safe Travel

The attribute was captured by selecting the number of people that fear for their life while conducting business and travel. The DM suggested that a perfect score of 1 in this measure will be when no Afghan fears for his life while doing business and travel. The current percentage of 56% Afghans having this fear was given a score of 0.19 by the DM. The SDVF of this measure is displayed in Figure 22.

SDVF for Suicide Bombings

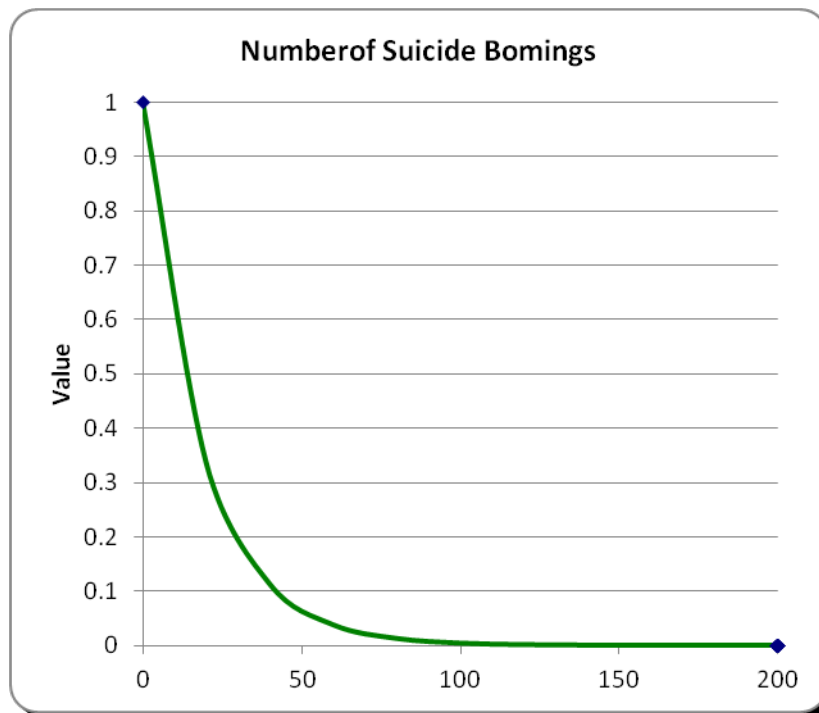


Figure 21 SDVF for Suicide Bombings

SDVF for Fear of Life

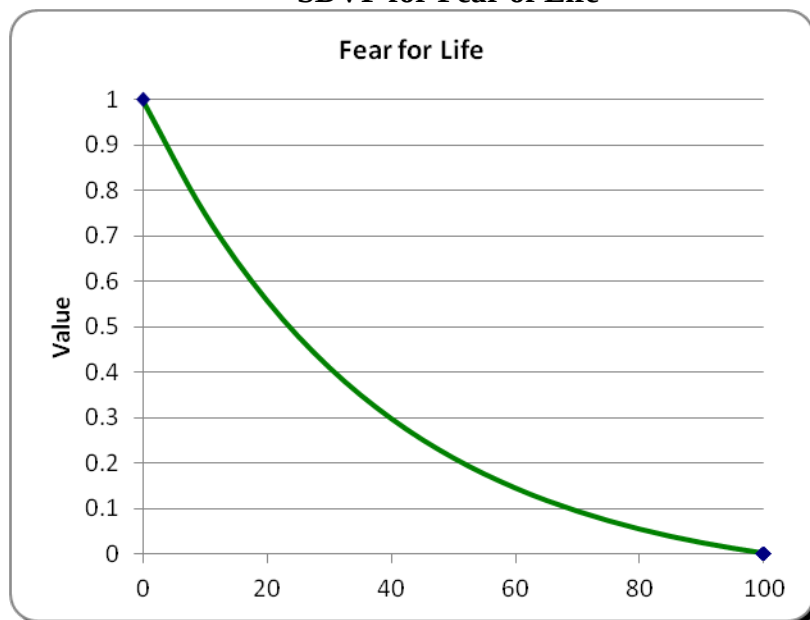


Figure 22 SDVF for Fear for Life

The different scores as suggested by the DM were plotted and the Figure 22 reveals a relatively small gain in value till 40% people fear for their life. However, there is a significant gain for the next 25 % that follows an exponential distribution and the value jumps from 0.25 to 0.75. The DM mentioned that though the maximum benefit is achieved in the last 25% however achieving that number can be focused on when other objectives in the hierarchy, like indigenous military capability and Disarmament, have seen material progress.

Minimizing Extremist Threat

The DM stressed that Security in Afghanistan could only be achieved if the extremist threat to Afghani people could be minimized. He suggested a more intrinsic approach where militant Afghans could be persuaded through Religious Decree(Fatwa) to lay down arms and abstain from attacking the civilian unarmed population. The measures suggested by the DM included counting the number of people who had turned in weapons as part of Disarmed Demobilized and Reintegrated (DDR) program. In order to gauge the religious support attribute, the DM opined that analyzing the people who had a soft corner for Taliban and militancy was an appropriate measure.

Number of Disarmed Demobilized and Reintegrated (DDR) personnel

A recent survey by the Brookings Institute estimates the presence of about 120,000 Afghans still in possession of illegal weapons. These Afghans are both insurgents belonging to different faction of militant groups and private armies kept by warlords

and Drug Mafia in Afghanistan. The DM highlighted a perfect score of 1 could only be achieved if everyone turned in his weapons and joined the DDR process. The documentation in this official process prevents people from turning in an obsolete weapon and also showing up for a second time. However, as of 2011, only 63380 Afghans have laid down arms and joined DDR process. This figure was scored a 0.33 according to the DM. The SVDF for DDR process is shown in Figure 23.

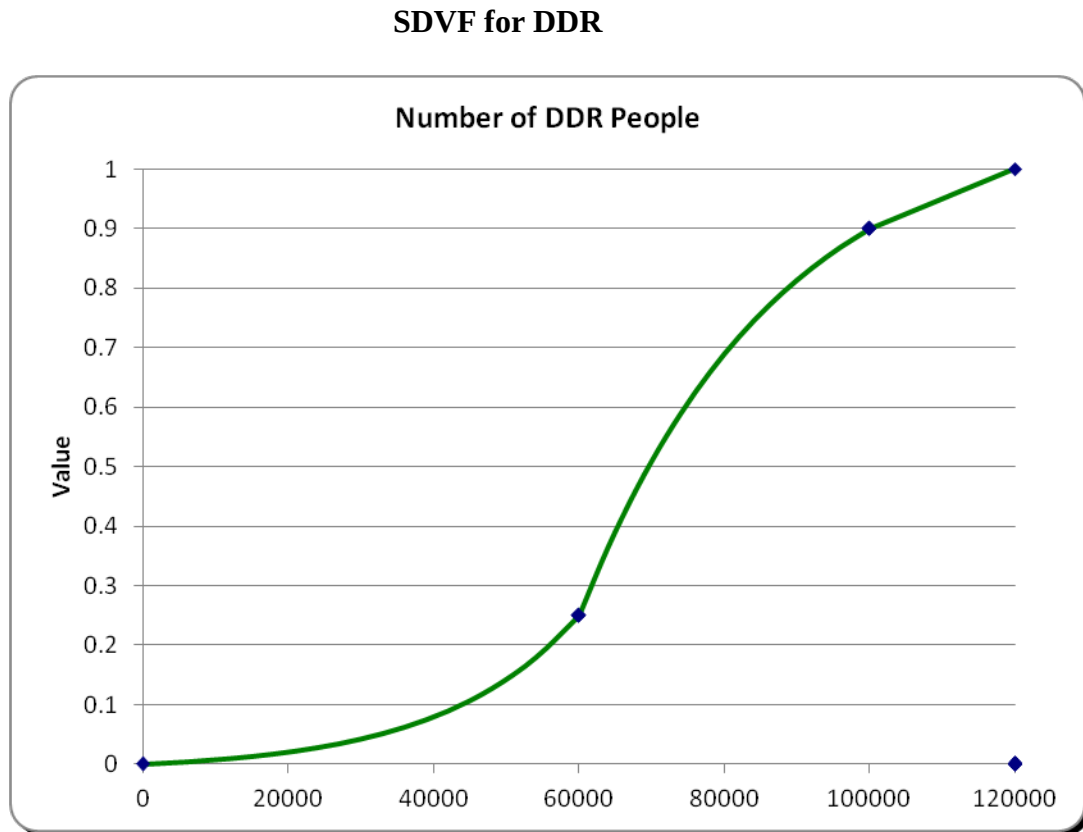


Figure 23 SDVF For DDR

Liking for Taliban

Similarly, if religious support could be gathered against the insurgency and drug sales, both of which are forbidden by Islam, the liking for the Taliban is likely to reduce. This will help in gaining more ground for the guerilla warfare which thrives on local support. The present liking for Taliban according to the survey lies at 11% (Asia Foundation, 2011). The DM suggested that anytime if this liking dropped to 0%, that will be a perfect score of 1, but he highlighted that achieving that may not be worth the effort and the cost required. At the same time he suggested that if the liking increased beyond 25%, then people are not happy with SSTRO and see the ISAF as intruders. The SVDF graph is displayed in Figure 24.

SDVF for Liking for Taliban

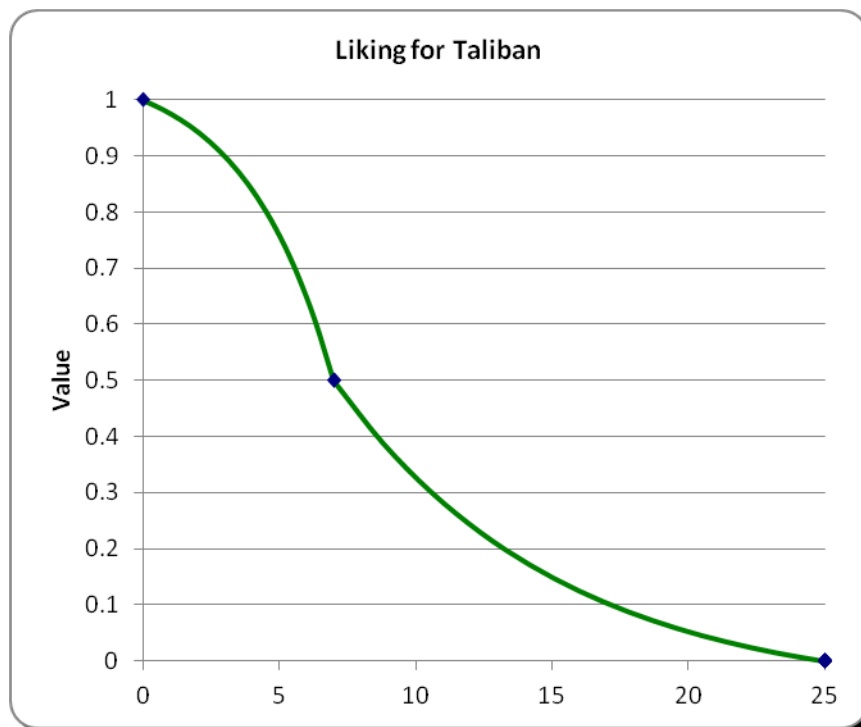


Figure 24 SDVF for Liking for Taliban

A closer look at Figure 24 reveals little gains in value from 25% to 10%. The gains are made between 8% till about 4% beyond which it might not be cost effective. The current situation of 11% scores a 0.294 according to the DM's assessment.

Military

The third pillar to enhance security was the military as described by the DM. Military was weighted twice as important when compared with Public safety and Minimizing Extremist threat. The DM pointed out that developing Indigenous Military strength and developing Military Infrastructure was twice as important as the time table for withdrawal of foreign troops from Afghanistan.

Time table for Withdrawal of Foreign Troops

This measure was categorical as described by the DM. The three were absence of a time table fetched a value of 0, a delay of up to 4 months in following the given time table was valued at 0.5 and implementing the given time table according to the mile stones set was valued at 1.

Indigenous Military Capability

This attribute was measured by the number of independent Afghan National Army (ANA) units. At present only 1 ANA unit is independent. The basic unit in the Afghan National Army is the kandak (battalion), consisting of 600 troops. Kandaks may be further broken down into four toli (company-sized units). A unit for this thesis means a

Kandak consisting of 600 soldiers (Mahon, 2010). The DM defined Independence for a unit as the capability to execute combat mission on its own and without the help of ISAF advisors.

The DM stressed that the value of initial 25% of units being independent was far more than that of last 25%. He suggested that as more ANA units became mission capable independently, the security is likely to improve and so will be the quality of training.

Figure 25 displays the concave curve for the independent ANA units; a significant trade off value for the first 80 units is evident in Figure 25.

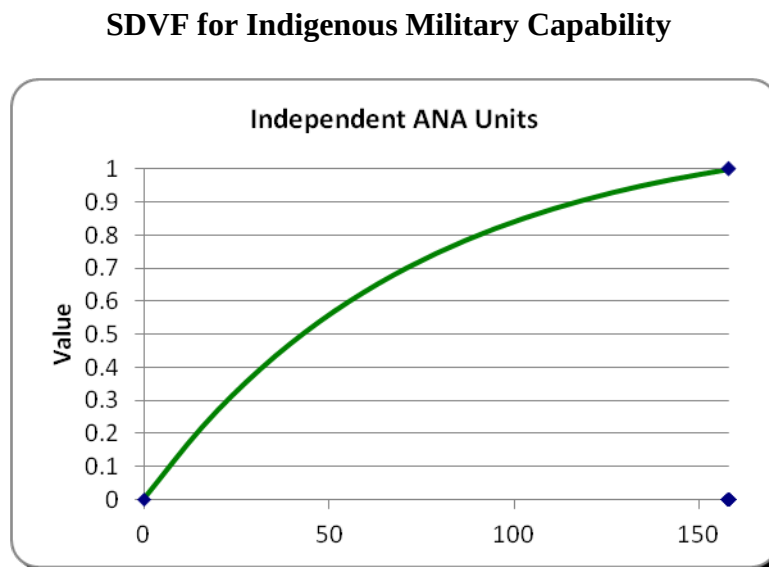


Figure 25 SDVF for Independent ANA Units

Military Infrastructure

The military infra structure was measured by a proxy measure, which was the amount of per capita US Dollar, spent on military infrastructure. Counting the number of bases for

this measure was ruled out since there were many temporary bases built by ISAF that varied in sizes and capacity. The current Afghan spending of 6.5 USD per capita was valued at 0.75 by the DM. He mentioned that spending over 7.5 USD per capita in this field might not be cost effective and was not a good tradeoff between dollars spent and the value gained. Figure 26 displays the SDVF for this measure.

All the attributes for the developed hierarchy are mutually exclusive and collectively exhaustive for this value hierarchy. Most of the attributes are operational whereas a few are proxy alternatives where a direct measure could not be found because of the unavailability of the data.

SDVF for Military Infrastructure

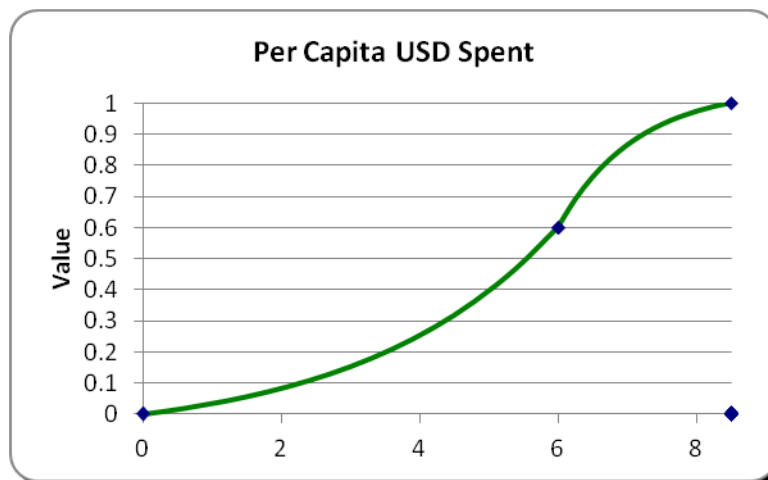


Figure 26 SDVF for Military Infra structure

3.1.4 Identify and develop alternatives using VFT.

Base Line Case and Alternatives

A Microsoft Excel based software “Hierarchy Builder” was used (Weir, 2008) to analyze the base line case and the alternatives. Prior to talking about the alternatives, it will be appropriate to comment on the data sources used. The data used for this thesis comes from a variety of sources. The United Nations sources like UNESCO, UNICEF, UNODC, World Bank, Asian Survey Foundation, Brookings Institute and Afghan Governments official statistical figures were used. Some of the measures were derived from the surveys conducted by these credible institutions.

Base Line Case

The base line is developed from the figures that are present in Afghanistan today. Some of the figures are as recent as December 2011, whereas in some cases the last available data comes from 2006. The measures were fed in the in Hierarchy Builder (Weir, 2008) software. The resulting score reveals how the SSTRO effort fares in the eyes of DM, In other words it represents how much the SSTRO effort in Afghanistan is valued by a common Afghani.

Case 1: Year 2007

After ascertaining the base line case, measures recorded in 2007 were put in the software to find out the 2007 value compared to base line. Owing to the absence of data for some of the measures, it will be inaccurate to judge the difference as concrete progress between 2007 and 2011. However, there were significant changes in the data that will permit us to compare the two years.

Hypothetical Cases

The hierarchy model developed in this thesis was used to provide insight focusing on a certain aspect of the first tier. Three such cases were run where focus stayed on improving the economy and education in the first case, focusing on improving the justice system in the next case and focusing on improving the security in the third case.

Justice-Focused Alternative

One alternative that was evaluated was an alternative focused primarily on the Justice branch, as Justice had the highest weight of all branches in the overall hierarchy and has often been criticized as the most problematic of Afghanistan's domestic issues. In this alternative, the hypothesis was that relative to the other branches, Justice received more focus from government and assistance organizations, more funding and training, and therefore more success relative to the other branches. The result of this is postulated as an improvement in many of the Justice measures, with no change in other branches, relative to the baseline current evaluated measures. Where Justice Values may interact or influence other branches, logical correlations were used to adjust from the baseline if appropriate. To evaluate this alternative, each measure of the Justice branch was improved by a variable margin, usually between 50 to 100% depending on its baseline value. In addition, correlated secondary measures improved as a result of the Justice focused improvements were Product Availability, increased Imports and Exports due to improved confidence in trade relationships, and decreased Liking For

Taliban due to the increased availability of non-Taliban imposed justice. All other measures were unchanged from the baseline. It may be postulated that the number of suicide bombings might decrease, due to improved police presence with an improved Justice system, however it might also be possible that increased attacks on the judges and police might result from the increased justice presence and infrastructure. Therefore, number of suicide bombings was left at the baseline value.

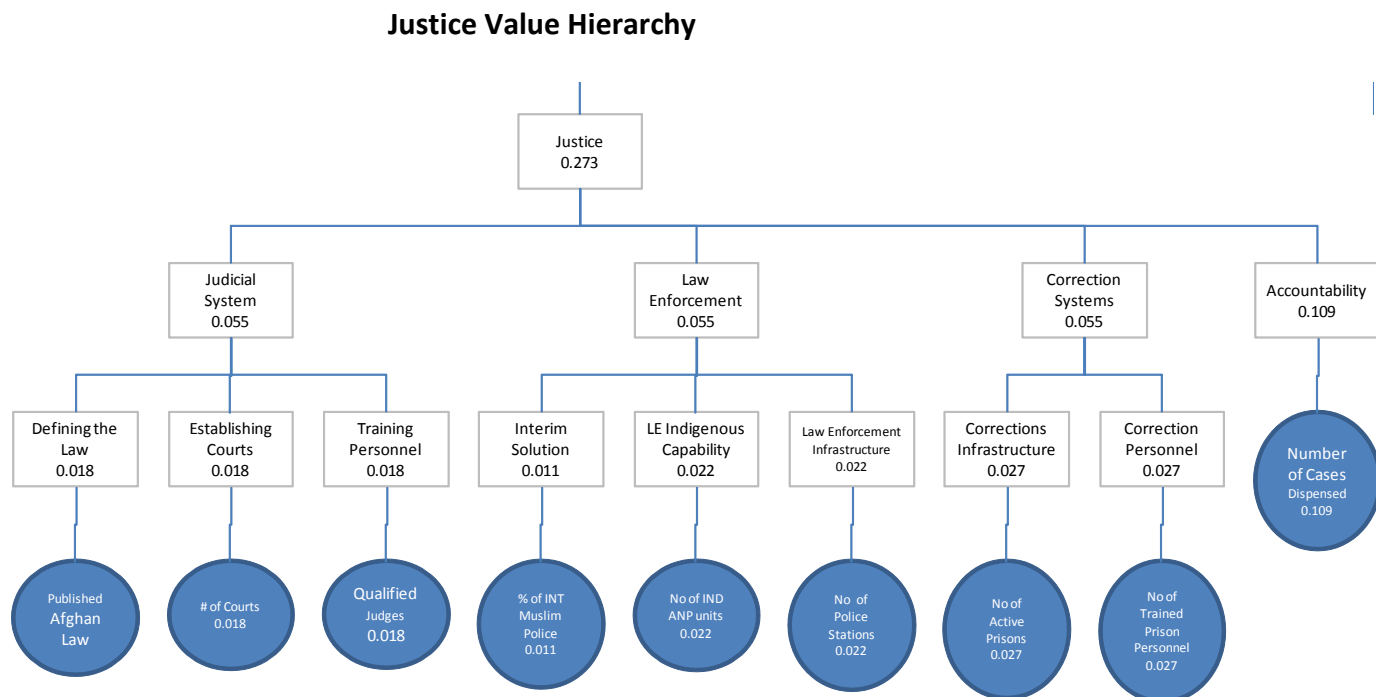


Figure 27 Justice Value Hierarchy

Security Focused Alternative

The other alternative hypothesized is related to focusing mainly on improving the security situations in Afghanistan. In this hypothetical alternative measures related to

security were assumed to improve by 50% to 100% from the base line case. All other measures were left at their base line value.

Economy and Education Focused Alternative

The other alternative hypothesized is related to focusing mainly on improving the economy and education in Afghanistan. In this hypothetical alternative measures related to these two aspects were assumed to improve by 50% to 100% from the base line case. All other measures were left at their base line value; however, it was assumed that improving economic and educational activity would result in a decrement in Taliban liking, suicide bombings and opium production. The hierarchies for economic uplift and education are displayed in Figures below.

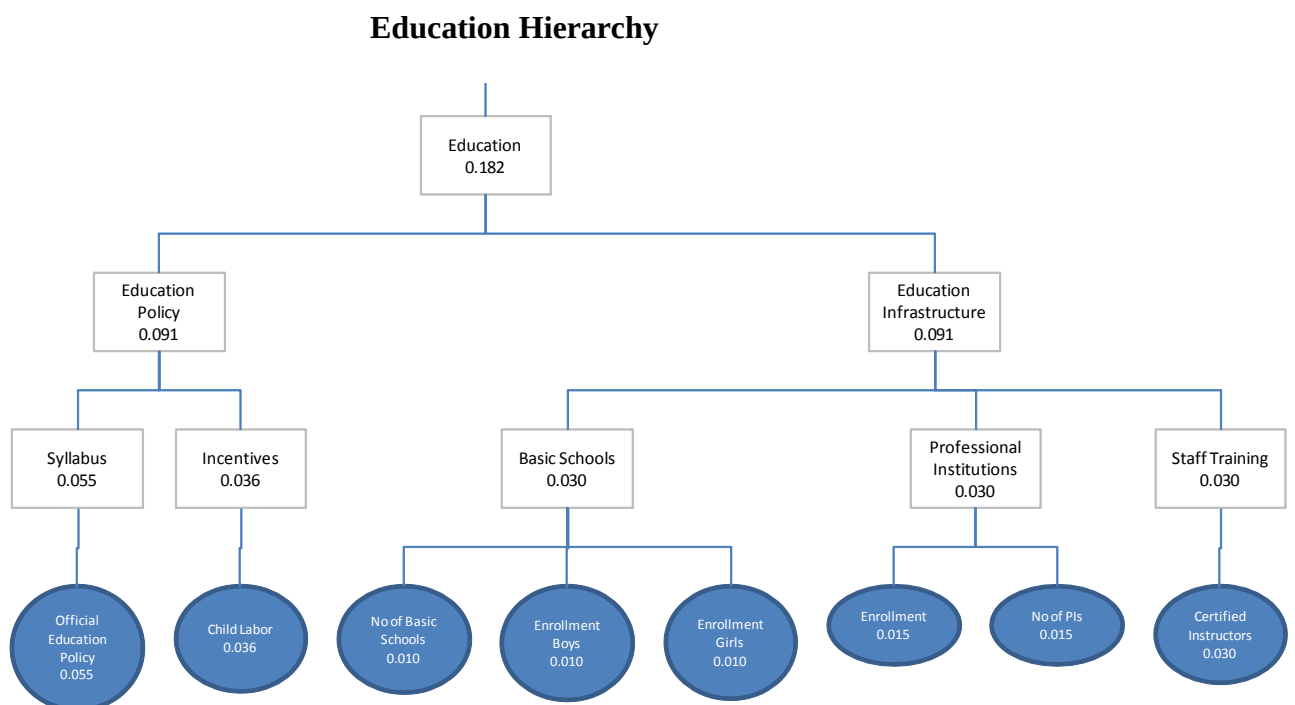


Figure 28 Education Hierarchy

Economic Uplift Hierarchy

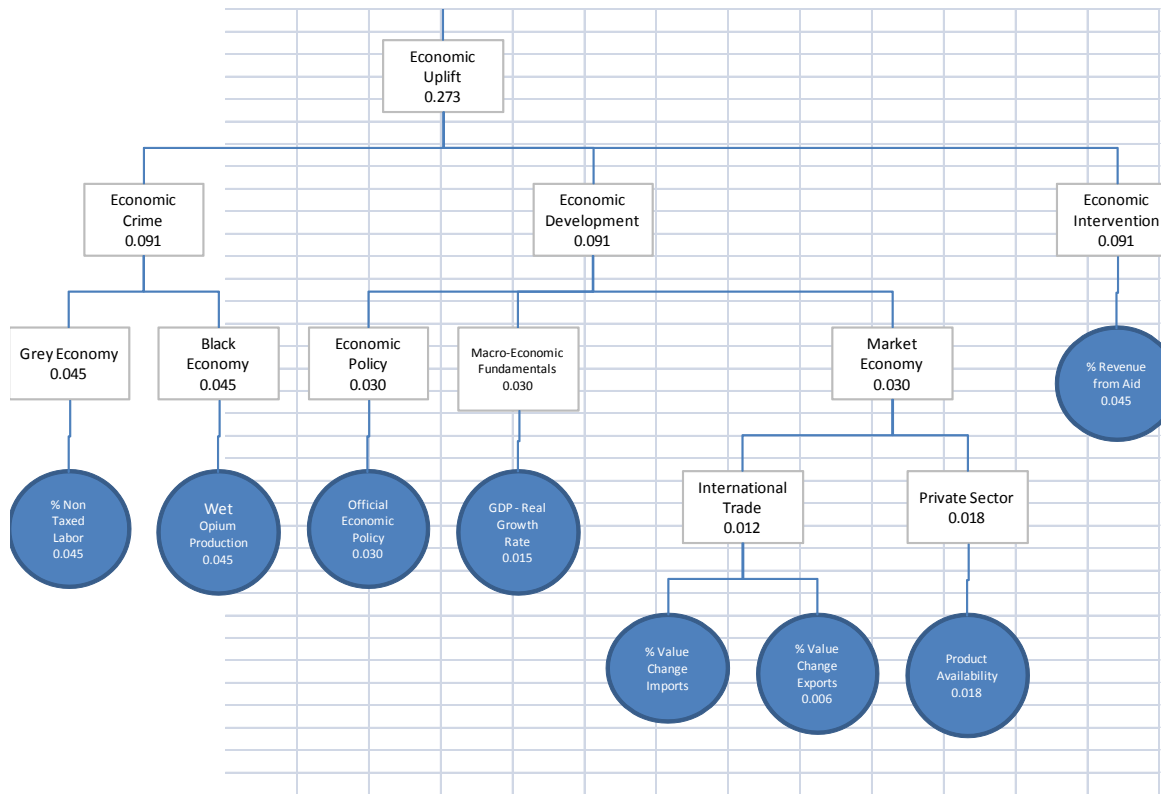


Figure 29 Economic Uplift Hierarchy

3.1.5 Asses weights for each measure from the decision maker

Weights are assigned to favor the more important measure; the larger the weight, the larger the effect of that measure. In order to asses weights, the swing weighting method was used. The Decision maker was asked to rank the sub-objectives security, justice, education, economic uplift and social well being and give points from zero to 100 according to their importance to least preferred one. After that step, the points are normalized to sum to one. For each sub-objective and measures, this

procedure was repeated. The local weights allocated by DM are displayed in the hierarchy diagram.

Local Weights for First Tier of Hierarchy

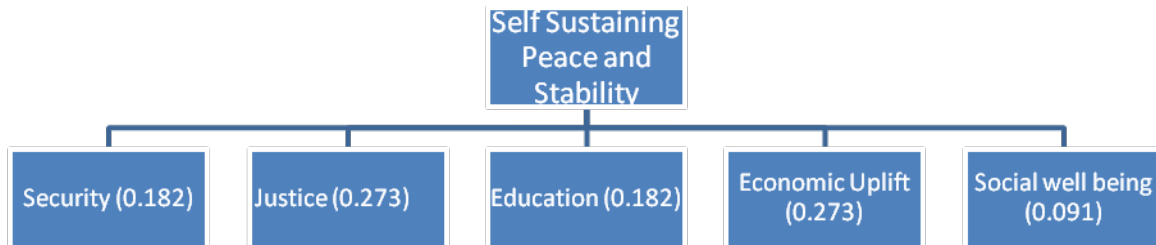


Figure 30 Local Weights Hierarchy

Local weights as determined by the DM for security are depicted in Figure 30.

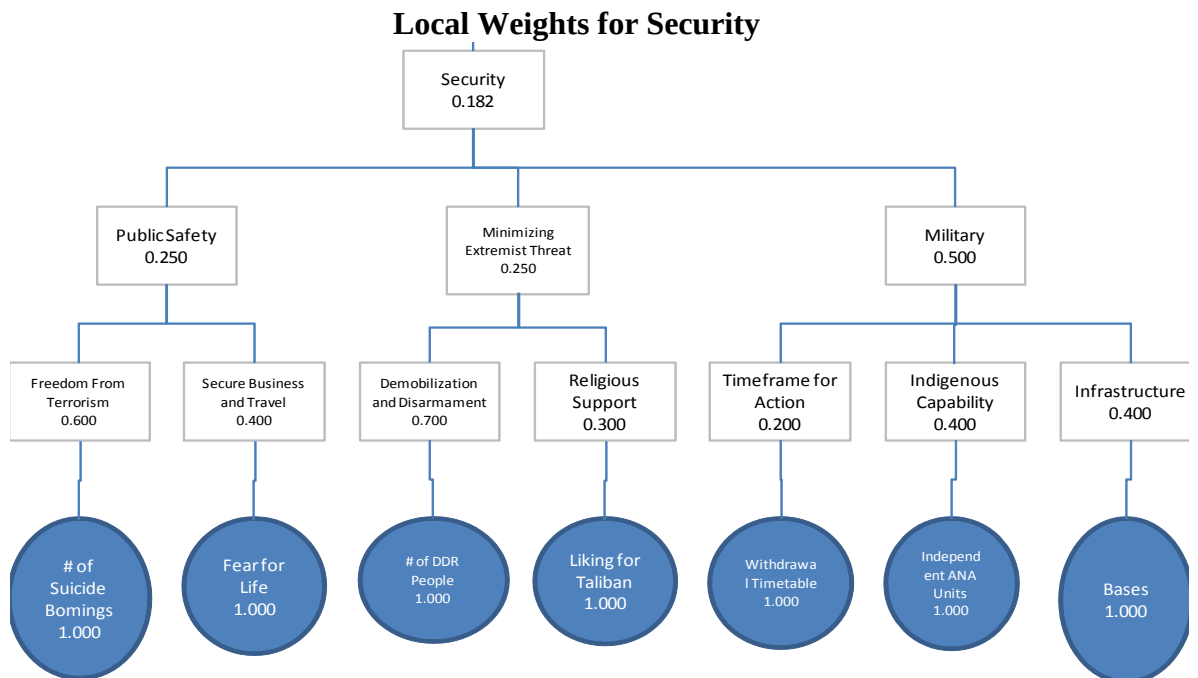


Figure 31 Local Weights for Security

The DM's opinion about the local weighting of Justice Hierarchy was recorded, following the similar procedure and is shown in Figure 31.

Local Weights for Justice

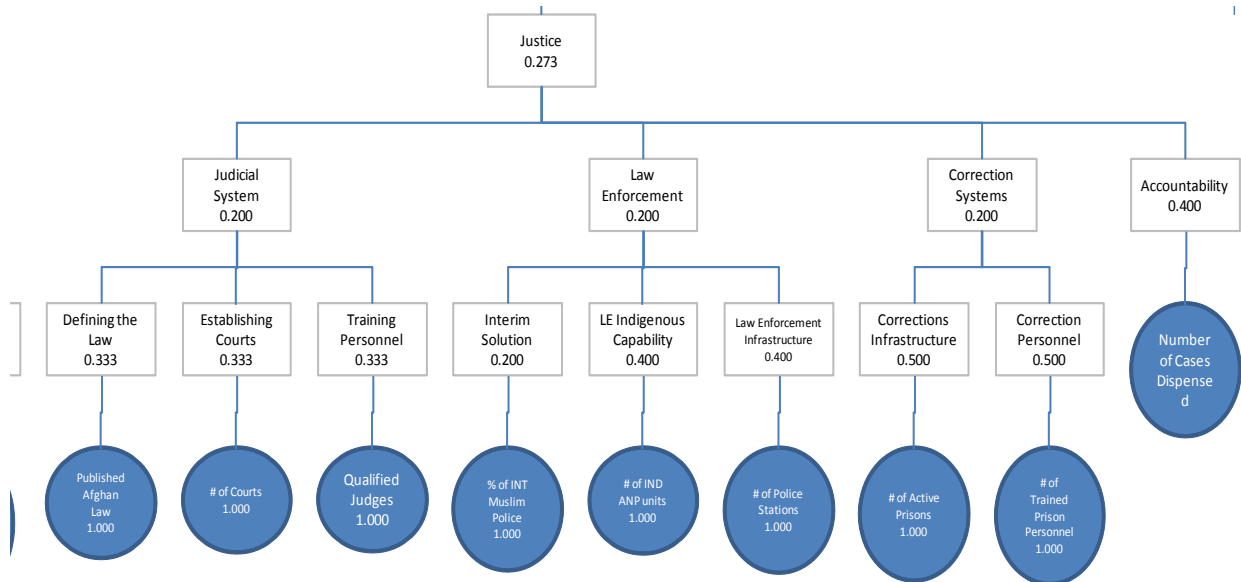


Figure 32 Local Weights for Justice

Similar hierarchies depicting the local weights according to the DM are displayed in Figures below. Each attribute of the hierarchy was debated at length and after weighting the DM was satisfied with the overall scores of the hierarchy. Table 9 depicts the consolidated weights as defined by the DM.

Consolidated Global Weights

SECURITY			0.182	JUSTICE			0.273
	# of Suicide Bomings		0.148		Number of Cases Dispensed		0.399
	Fear for Life		0.099		Published Afghan Law		0.066
	# of DDR People		0.176		# of Courts		0.066
	Liking for Taliban		0.077		Qualified Judges		0.066
	Withdrawal Timetable		0.099		% of INT Muslim Police		0.040
	Independent ANA Units		0.198		# of IND ANP units		0.081
	Bases		0.198		# of Police Stations		0.081
EDUCATION			0.182		# of Active Prisons		0.099
	Official Education Policy		0.302		# of Trained Prison Personnel		0.099
	Child Labor		0.198	SOCIAL WELL-BEING			0.091
	# of Basic Schools		0.055		Availability Clean Drinking Water		0.220
	Enrollment Boys		0.055		% People Food Poverty Level		0.220
	Enrollment Girls		0.055		# of Shelters Constructed		0.220
	Enrollment		0.082		Physicians per 1000 people		0.209
	# of PIs		0.082		% w/ Electricity		0.033
	Certified Instructors		0.165		Vehicles per 1000 people		0.033
ECONOMIC UPLIFT			0.273		% w/ Access to Comm		0.033
	% Non Taxed Labor		0.165		% w/ Access to Sanitation		0.033
	Wet Opium Production		0.165				
	Official Economic Policy		0.110				
	GDP - Real Growth Rate		0.110				
	% Value Change Imports		0.022				
	% Value Change Exports		0.022				
	Product Availability		0.066				
	% Revenue from Aid		0.333				

Table 9 Consolidated Global Weights

Local Weights for Education

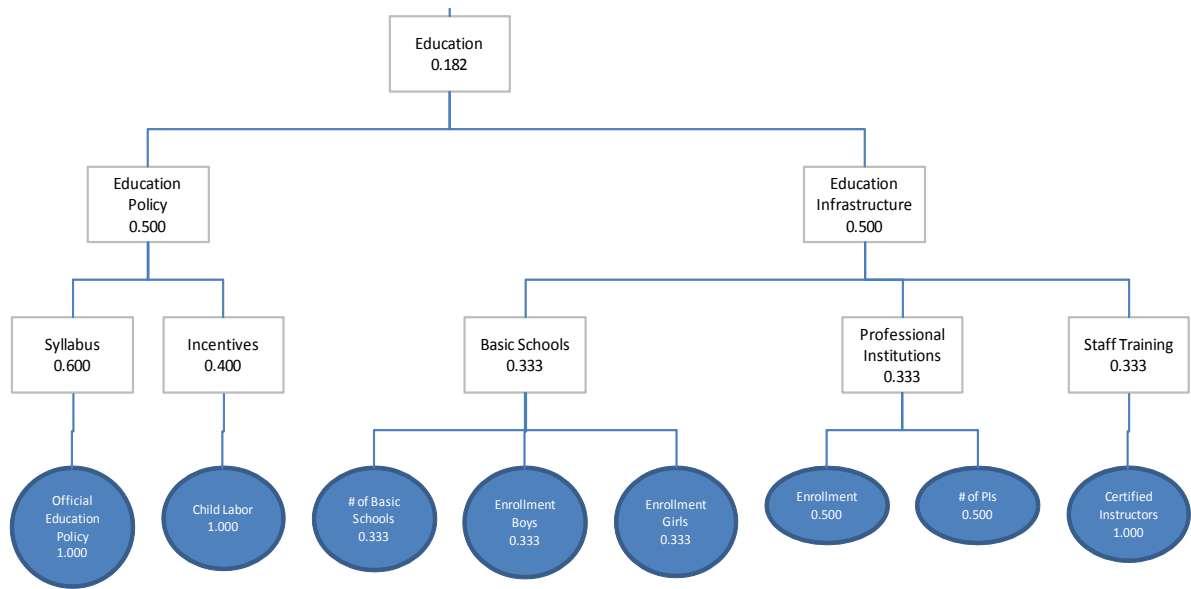


Figure 33 Local Weights for Education

Local Weights for Economic Uplift

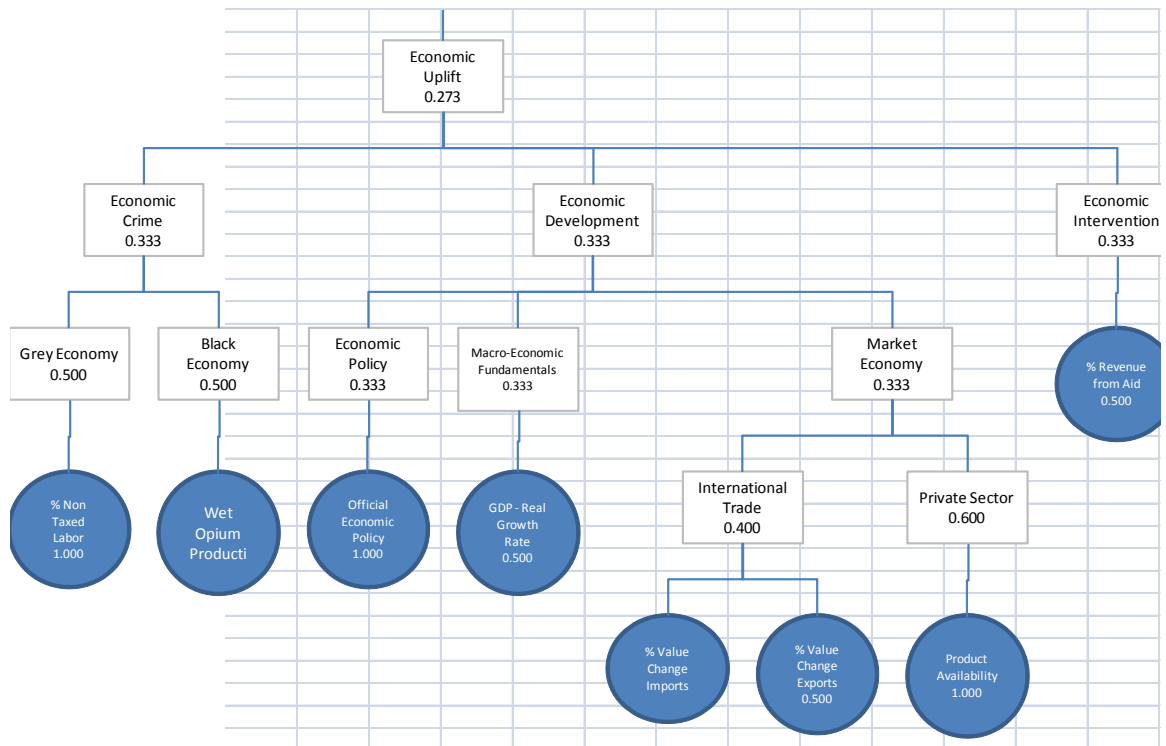


Figure 34 Local Weights for Economic Uplift

Local Weights for Social Well-Being

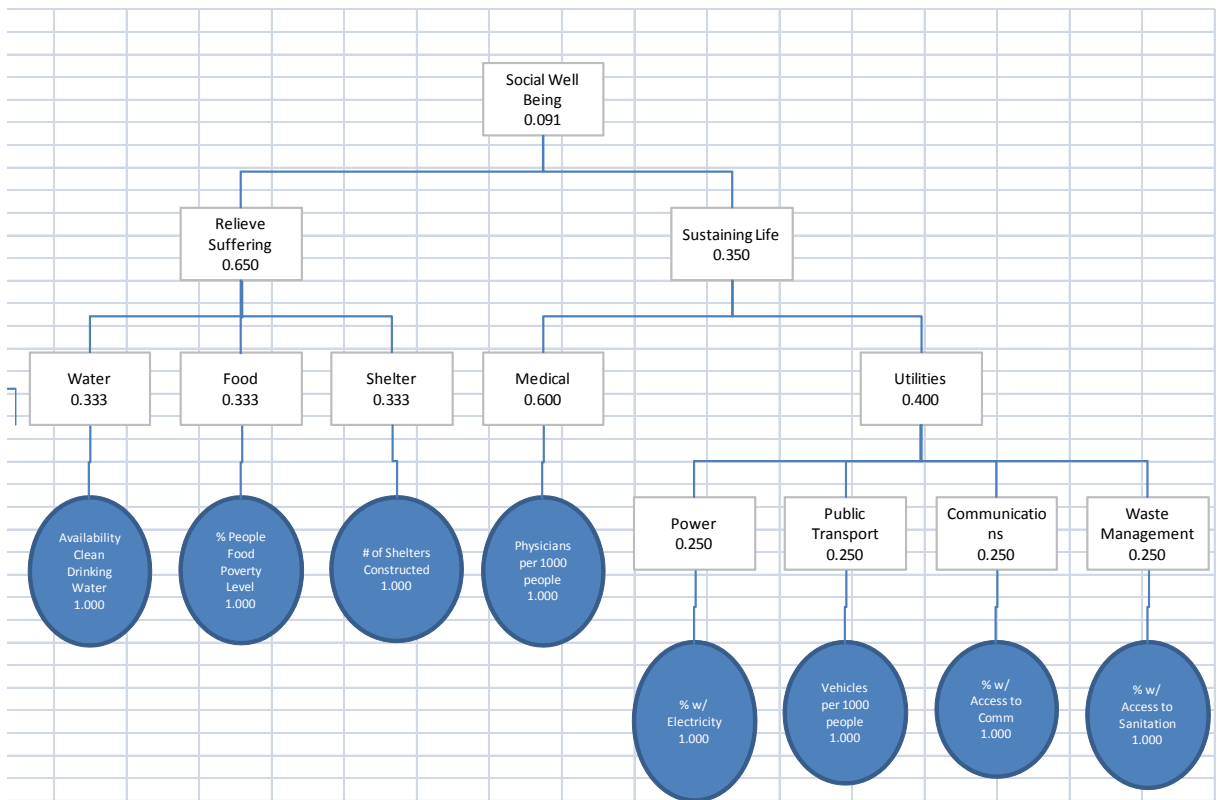


Figure 35 Local Weights for Social Well-Being

IV. Results and Analysis

This chapter analyzes the results obtained by application of the VFT process. These steps consist of scoring, ranking and sensitivity analysis on the developed model. Data for the VFT is gathered from the surveys conducted by Bookings Institute, Asian Journal and United Nations sources like UNODC, UNICEF, UNHCR. The data where available is credible and is well accepted. However, if the user has specific other sources of data that are consistent overtime and with the measures they could rescue the process. Sensitivity analysis is performed on objective weights. Analysis results are obtained by using the Hierarchy Builder (Weir, 2008)

4.1 VFT Analysis

4.1.1

Score and rank alternatives on each of the value measures and asses the uncertainty associated with the scores.

A score is calculated for each alternative by summing up the scores from each value function and the corresponding weights for each measure. The scores are then combined to give a summation for each alternative and thus used to rank them. Scores are used only for ranking alternatives; they do not represent how much better one alternative is than another one.

Figure 36 shows the ranked alternatives in terms of how well they fulfill each of the decision maker's objectives of Security, Justice, Education, Economic Uplift and Social Wellbeing. The hypothetical alternative, where a dedicated focus to improve

education and economic uplift was made is ranked first. Although the hypothetical alternative where focus was made to improve Judicial system is not very far behind in ranking. The first ranked hypothetical alternative tends to score better in areas that are a logical consequence of an educated society that can create job opportunities for its citizens. The result supplement the belief of the DM, who, time and again insisted on the importance of education and economy for an Afghan.

Overall Ranking and Scoring of Alternatives

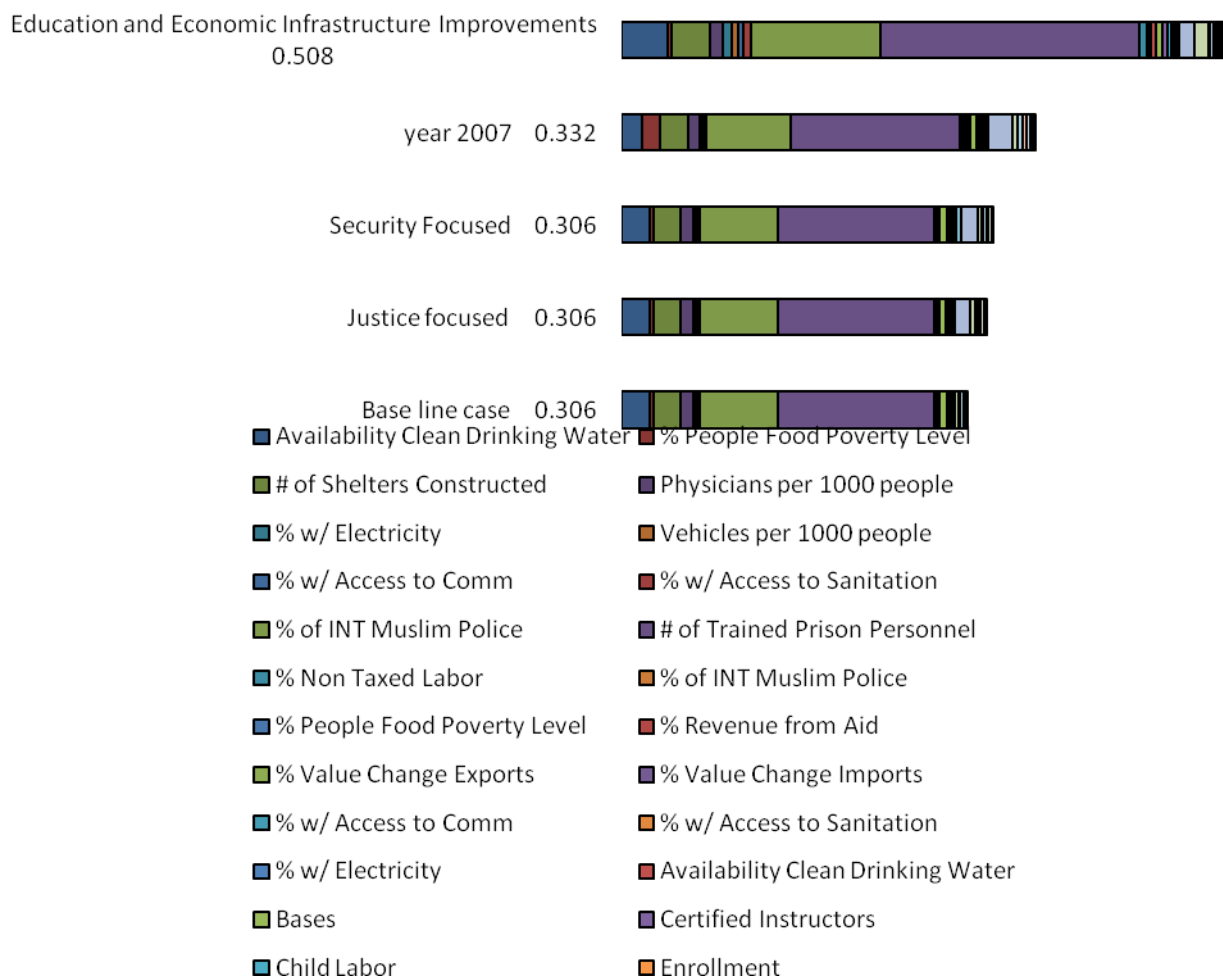


Figure 36 Overall Ranking and Scoring of Alternatives

By viewing the value contributions of individual evaluation measures, it becomes clear which measures differentiated the alternatives from each other. Figure 37 shows how well each alternative performed for the 05 first tier objectives. If we look at the green bar that represents the number of shelters constructed in a year, the base line figure remains 8000 shelters, thus the size of the green bar is common for all alternatives except the hypothetical alternative where improving the economy and education was focused. The number of constructed shelters was assumed to be 12000 per year for this hypothetical scenario which explains the increase in the dimensions of green bar in Figure 37.

Scoring and Ranking of Alternatives by Objectives

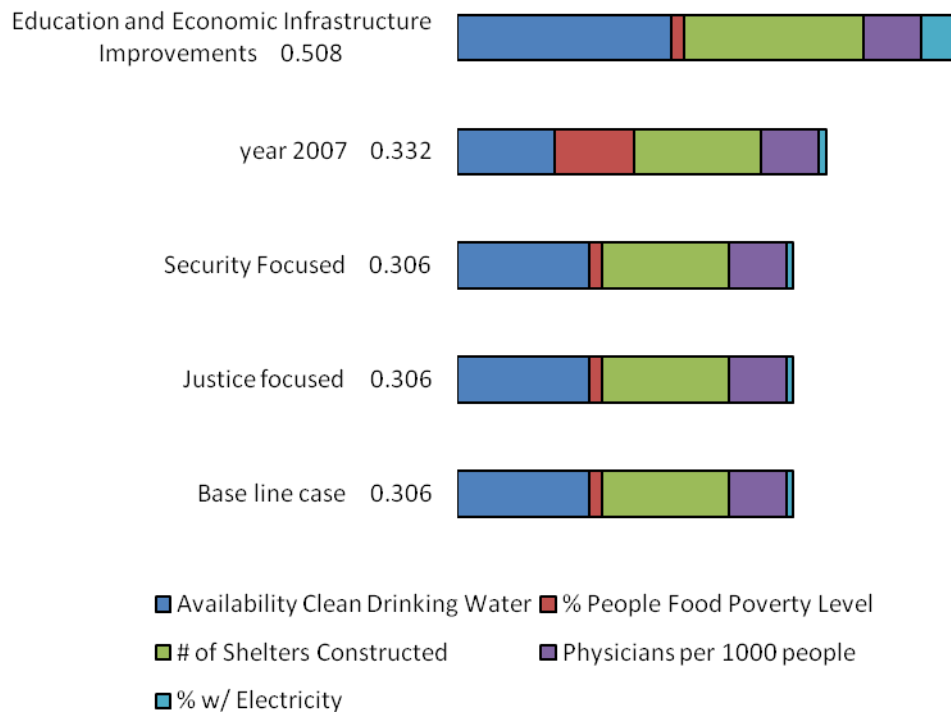


Figure 37 Scoring and Ranking of Alternatives by Objectives

Figure 38 represents the contribution of each measure on security objective. An insight from Figure 38 is the increased number of people turning in Arms and joining the DDR process in the hypothetical scenario of focusing on educational and economic development. Similarly, educating the masses did reduce the extremist approach of liking Taliban in the notional case.

Scoring and Ranking of Alternatives by Security



Figure 38 Scoring and Ranking of Alternatives by Security

By looking at the sub-objectives on objective related to Justice in Figure 39 and Figure 40 that depicts ranking by education objective, an insight can be drawn as to what extent focusing on these objectives yields the desired value of DM. Focusing on improving the Justice system achieves 81% of the value as desired by the DM.

Scoring and Ranking of Alternatives by Justice

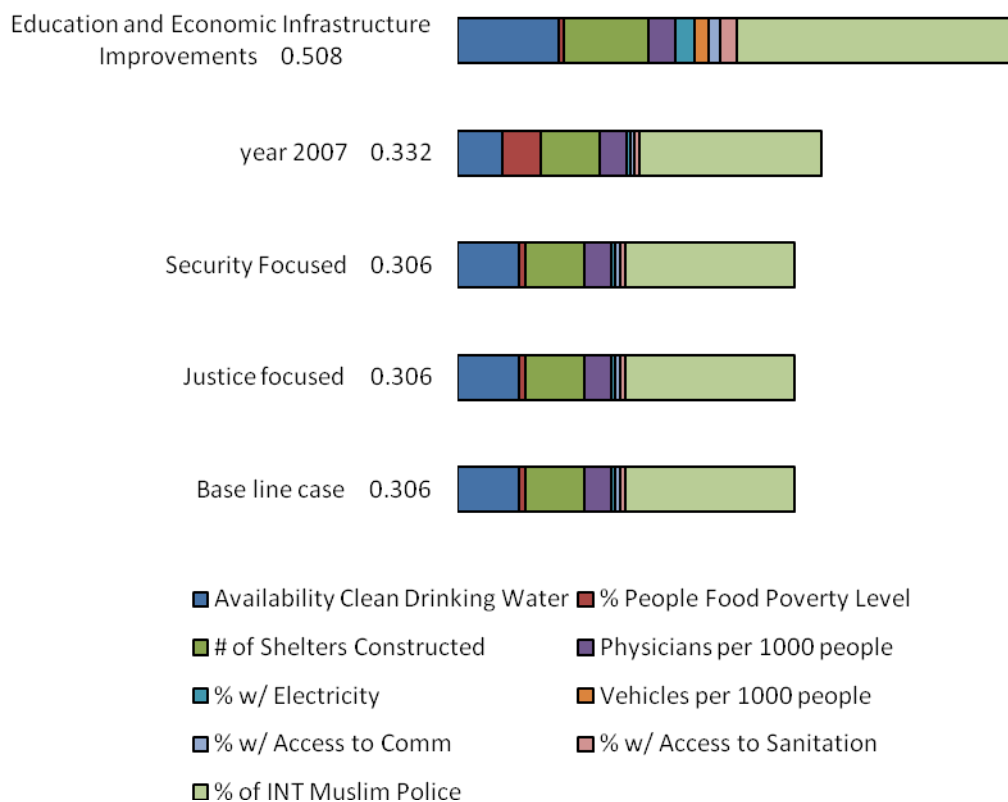


Figure 39 Scoring and Ranking of Alternatives by Justice

In the same fashion, Figure 40 shows that 62.3% of the Education objectives as opined by the DM are achieved in the hypothetical scenario of education and economic uplift. The increase in enrollment rate of both boys and girls in Afghanistan also results in the

reduced child labor as more children attend school because of the proposed incentives by the DM.

Scoring and Ranking of Alternatives by Economic Uplift

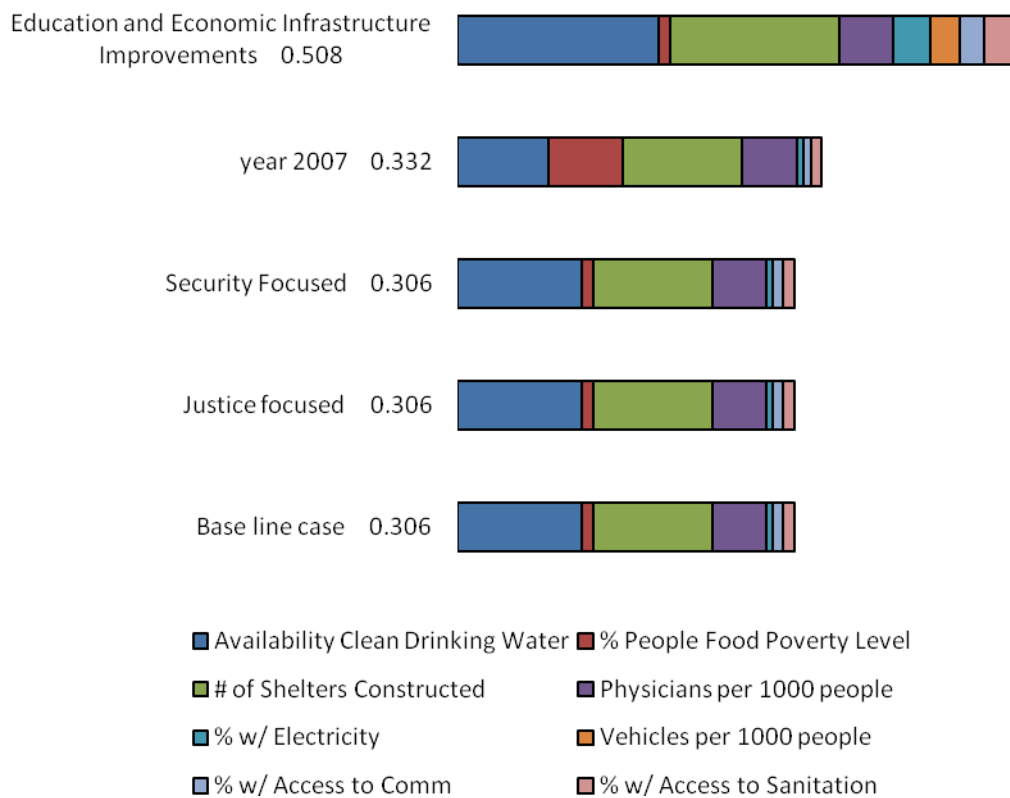


Figure 40 Scoring and Ranking of Alternatives by Economic Uplift

The ranking of alternatives, based on the economic uplift objective depicts economic conditions in Afghanistan as the weakest area. Despite concentrated efforts on improving the economic infra structure, the hypothetical alternatives only achieves a

25.7% of the DM's solicited value. However, since this was only 10.9% in 2007, it is still a significant improvement.

Social well being, is accorded the lowest weight by the DM for his objectives. Figure 41 depicts the scores of each alternative in the objective of social well being.

Scoring and Ranking of Alternatives by Social Well Being

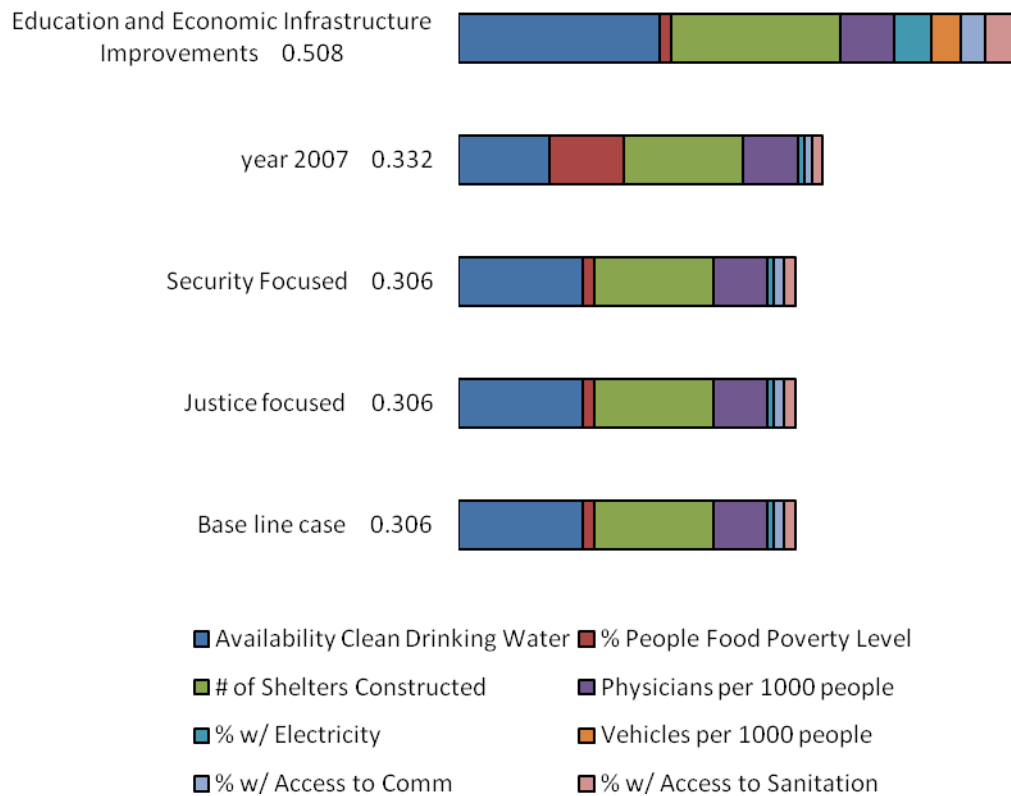


Figure 41 Scoring and Ranking of Alternatives by Social Well Being

4.1.2 Analyze the sensitivity of the analysis to assumptions

Sensitivity analysis is a method of verifying that the model is built on proper assumptions. One of the most often questioned assumptions in VFT models is that the evaluation measures have been given the proper weighting and accurately depict the decision maker's preferences. Sensitivity analysis helps the decision-maker verify these weightings by showing how the ranking of alternatives may change based on variations in measure weights.

Graphical demonstration is conducted to illustrate how each alternative will receive more or less value depending on the weight of the selected evaluation measure. Sensitivity analysis will be made for objectives weights that are Security, Justice, Education, Economic Uplift and Social wellbeing to demonstrate the approach.

Sensitivity Analysis on Security Objective

Decision maker's weight is originally 0.182 for Security which is indicated by the vertical line in the Figure 42. Alternatives' cross point on this line indicate their respective rankings. Ranking from the top to bottom is the ranking from the best to worst alternative. By visual inspection of Figure 42, it is obvious that the hypothetical alternative of focusing on education and economic uplift is ranked the best at the present weight. The hypothetical alternative of focusing on improving justice matches the first one if the weight for security was to increase from its present value to a value of 0.34. If the weight allocated to the Security was to increase to a value of 0.49, then

hypothetical alternative of focusing on enhancing security in Afghanistan will be the best alternative.

If the stakeholders believe that such a shift in weighting is possible, then they may wish to review their scoring and weights for possible change. On the other hand, if the width of the range is fairly wide, which it appears to be, they can be confident that the ranking is sound.

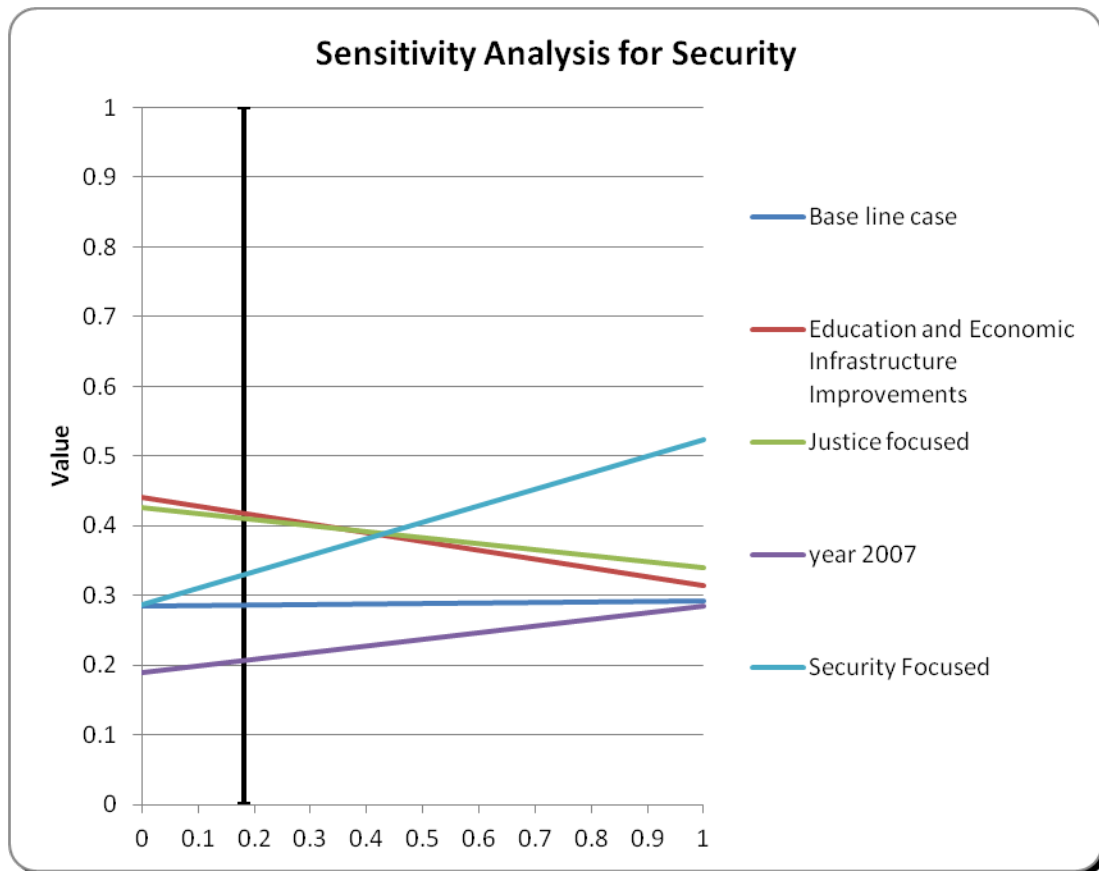


Figure 42 Sensitivity Analysis for Security Objective

Sensitivity Analysis on Justice Objective

The next sensitivity analysis is made on the objective of Justice. The decision maker's weight is originally 0.273 for Justice, which is indicated by the vertical line. By visual inspection of Figure 43, it is obvious at present the hypothetical alternative of focusing on economic uplift and education is the best choice, however if the weight of justice objective was to increase beyond its present value, focusing on improving Justice will clearly become the best alternative. Similarly, any lowering of weight on justice below a value of 0.1 will make it inferior to hypothetical alternative of focusing on security.

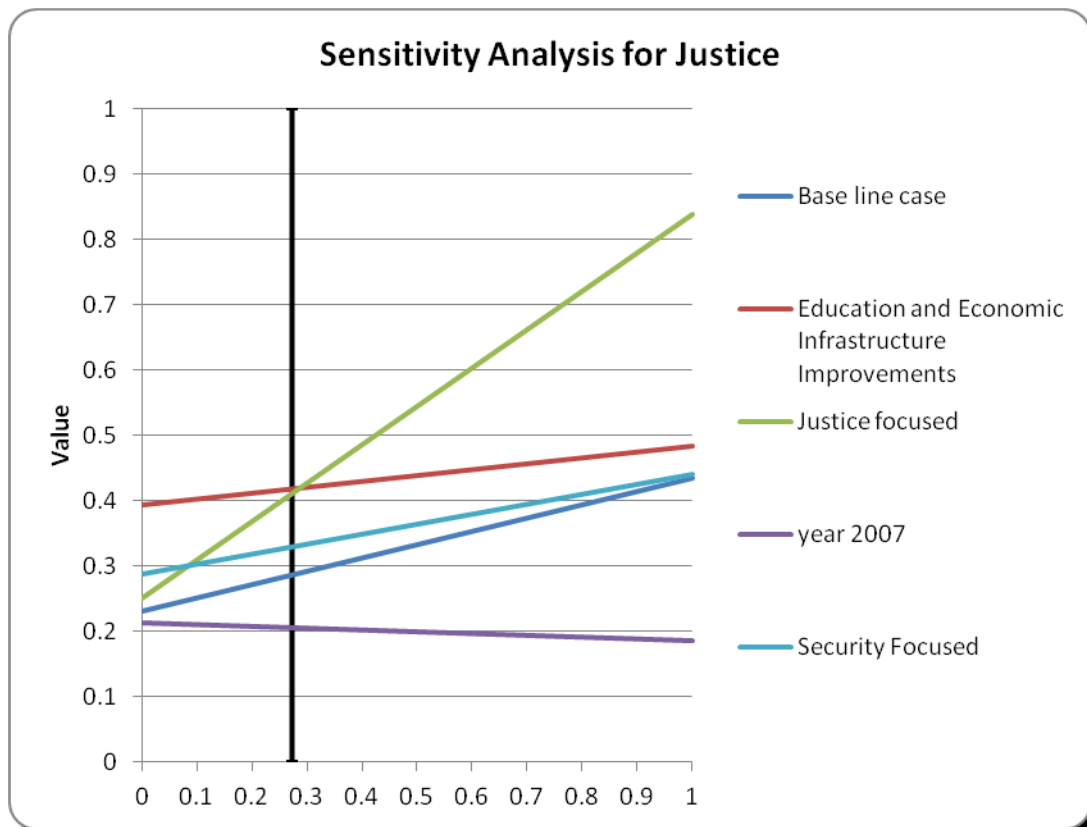


Figure 43 Sensitivity Analysis for Justice Objective

Sensitivity Analysis on Education Objective

The decision maker's weight is originally 0.182 for Education, which is indicated by the vertical line in Figure 44. It can be seen from the figure 44, that the hypothetical alternative for improving the education and economic uplift is the first ranked alternative at present and will continue to dominate if the weights on education objective are increased. However, if the weights on education objective are lowered below a value of 0.15 and below, then the hypothetical alternative of justice focus becomes the logical choice for the decision maker.

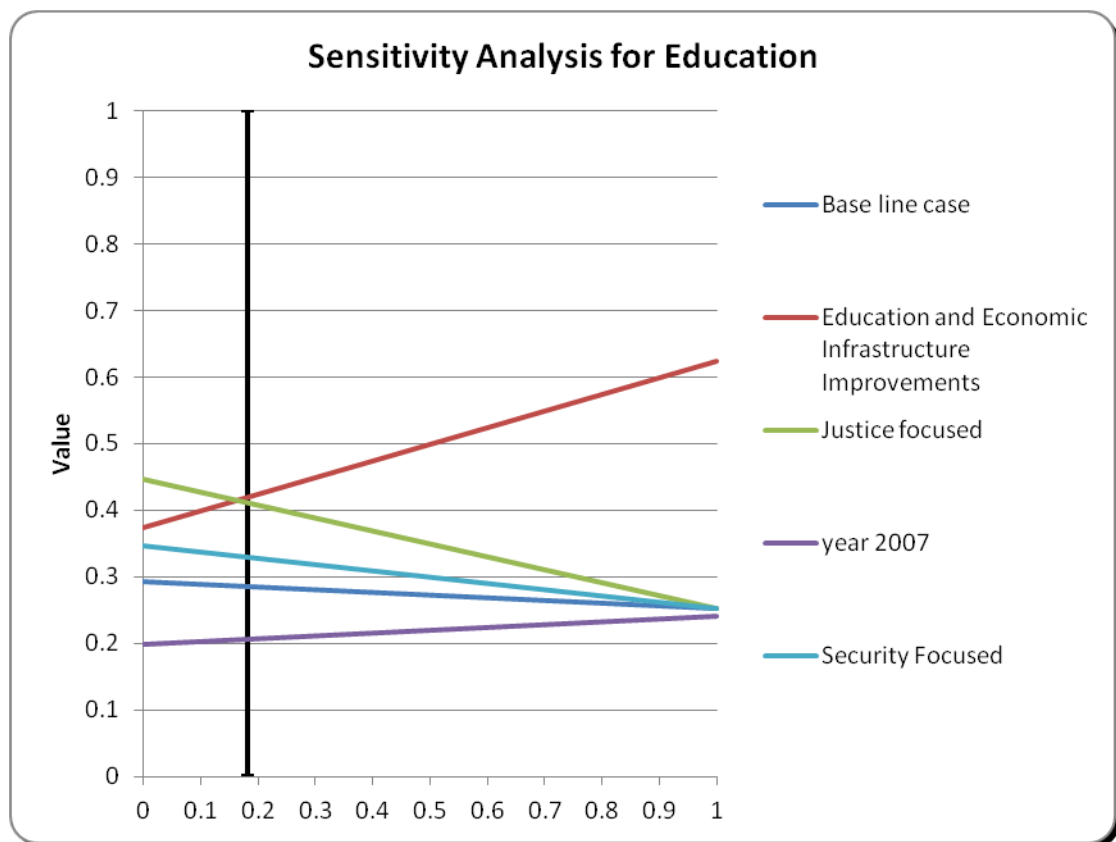


Figure 44 Sensitivity Analysis for Education Objective

Sensitivity Analysis for Economic Uplift Objective

In the same manner, a sensitivity analysis for the objective of economic uplift is shown in Figure 45. The current weight allocated by the DM to economic uplift objective is 0.273, which is indicated by the black line. It can be seen that the best alternative at the present weight is the hypothetical alternative focusing on economic and education improvements. This alternative will remain dominant if the weights for the Economic objective are increased. However, if the weights are reduced below a value of 0.24, in that case hypothetical alternative focusing on the justice will become the best alternative.

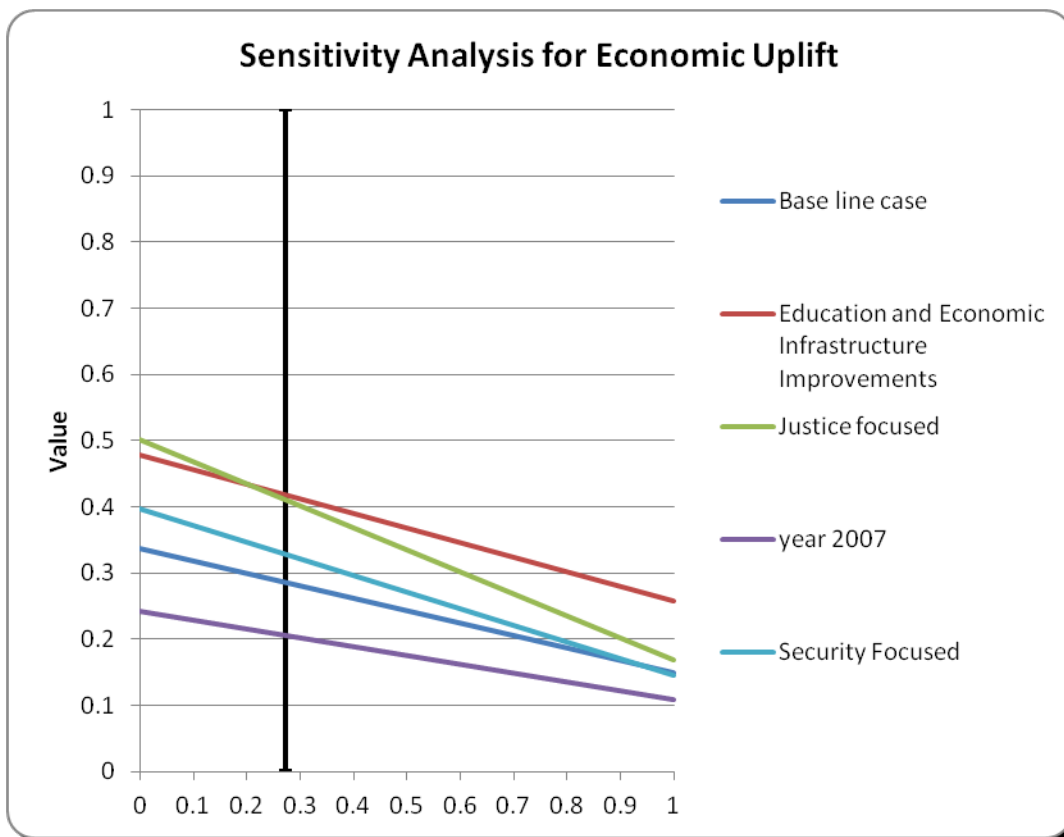


Figure 45 Sensitivity Analysis for Economic Uplift Objective

Sensitivity Analysis for Social Well Being Objective

In the same manner, a sensitivity analysis for the objective of social well being is shown in Figure 46. The current weight allocated by the DM to the social well being objective is 0.091, which is indicated by the black line. It can be seen that the best alternative at the present weight is the hypothetical alternative focusing on economic and education improvements. This alternative will remain dominant if the weights for the Economic objective are increased. However, if the weights are reduced below a value of 0.05, the hypothetical alternative focusing on the justice will become the best alternative.

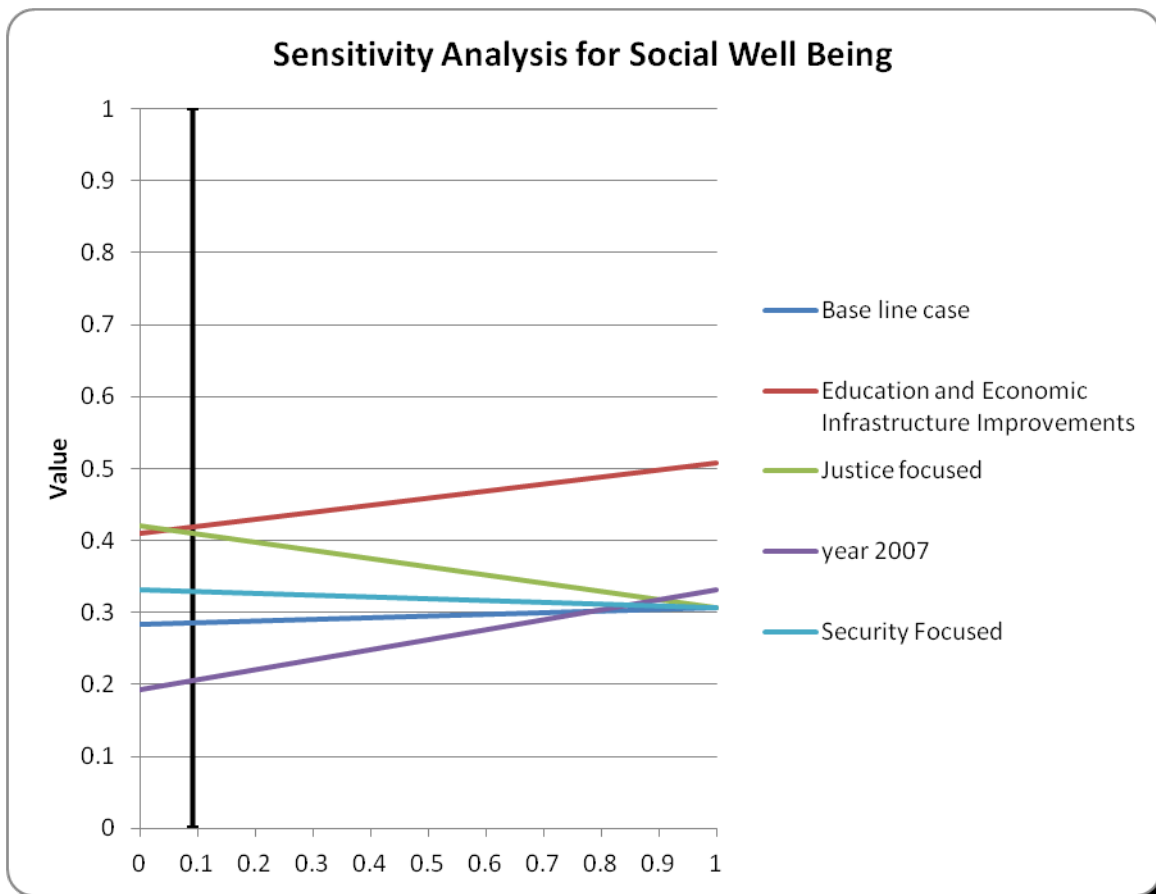


Figure 46 Sensitivity Analysis for Social Well Being Objective

Overall Sensitivity Comments

Overall, it can be assumed that year 2007 and 2009 are the lowest ranked alternatives according to the weights prescribed by the DM for this value hierarchy. In reality also, the nation building in Afghanistan has not benefited the Afghan masses in general and the model in this thesis is quite an accurate reflection of the feeling of the Afghani masses.

V. Summary and Conclusion

This chapter provides a brief description of this research, answers the questions stated in Chapter 1, states conclusions that are obtained from the research and suggestions for future work.

5.1 Summary of the Research

In Chapter 1 problem definition, research questions, research approach and assumptions are stated.

Chapter 2 includes techniques and related studies for these techniques. At first, a brief account of cultural and religious influence in Afghanistan is narrated, followed by the basics of Decision Analysis. It then highlights the modalities of VFT technique and the steps used to create different alternatives that have appropriate attributes for DM. SSTRO are then discussed though recent history and common grounds amongst various authors for conducting SSTROs are narrated.

Chapter 3 presents methodology and implementation of VFT. First, a value hierarchy is created to define desired attributes of alternatives. The reasoning behind selecting values and seeing them in the eyes of Afghan religion and culture is explained. Then DM stated SDVF for each measure of the hierarchy. Alternative identification is made due to the measures of the hierarchy. After defining weights, the additive value model is used to find the overall score and ranking of each alternative.

Analysis phase is presented in Chapter 4. VFT sensitivity analysis is made on main objectives. Since the most important assumption is the proper weight data. Different avenues

for exploration are highlighted in the sensitivity analysis that will help in achieving better results for SSTRO in Afghanistan.

5.2 Conclusions

Bringing peace to a war torn Afghanistan is a problem that has baffled almost everyone in the world today. The solutions and remedies applied have failed to deliver, and that is why Afghanistan is still burning today. This thesis stresses on the need to focus on doing what is valued by an Afghani recognizing the cultural and religious difference are enormous if they are ignored effects may mislead an Afghani.

The purpose of this research effort is to highlight the Afghan perspective of nation building. This thesis focuses on Afghani values and what a common person sees as important and beneficial to his life. Eight steps of VFT that are stated by Kirkwood are used to develop a robust model for the decision problem. The robustness of the model is checked by sensitivity analysis. For this research, the DM is satisfied by the results for weighting and weights reflect their preference ranking. Hence, results are verified.

5.3 Strengths

Decision Analysis process may be a complicated process for most of the decision makers. Most of the points can be misunderstood without the presence of decision analysis background. VFT overcomes these drawbacks of DA. By defining the attributes and their values, alternatives are selected based on the DM considerations by reducing biases of choosing alternatives directly from the real world. Therefore, using this technique allows an objective analysis for the DM in comparison to other techniques in the literature.

In addition, DM does not have to know decision analysis issues; and VFT does not necessitate the explanation of terms in the DA terminology. That makes communication between analyst and DM easy and time efficient.

This research takes into account the Islamic principles and the cultural doctrines of Afghani people, an aspect that has not been researched at length. Hence, the model provides an objective and repeatable process. It can be used as an assessment tool to measure progress in Afghanistan that will be fairly accurate pulse check of the country. A key contribution of the effort is the insights gained for a non –Westerner view of SSTRO in the region.

5.4 Limitations

This research has some limitations. First, data for all the measures used came from open sources and in few cases it was as old as a 2006 survey. The data limitation for this study stems from the non-availability of regular surveys and statistics to give the available data. Thus, for this study, data used comes from a variety of diverse sources and data generation. On the other hand, collecting suitable data for an appropriate analysis necessitates a long amount of time.

The other limitation was the hypothetical alternative creation, in the absence of yearly data points, a statistical technique to predict future data could not be applied and the DM was requested to provide inputs for the hypothetical alternative generation.

Additional limitation is the deferrable weights and measures to score the alternatives. Since these depend on the current DM and analyst. Weighting can make the value model very sensitive due to given weight by the decision maker. The other limitation of the model is bias introduced by a single decision maker after the determination of alternatives. This bias may be

removed by selecting a group of decision makers from different backgrounds and ethnicity within Afghanistan; nevertheless, this bias may not be removed from the current analysis.

The model may be initially used for a province in Afghanistan, statistics may be gathered for a predetermined time like 6 months and comparison with the present models being applied in Afghanistan can validate the efficacy in the real life. If found successful and satisfactory, the model may be applied to the whole SSTRO effort in Afghanistan.

5.5 Future Work

For future work on the same problem or similar problems, the following research can be done;

- Instead of Single Dimension Sensitivity Analysis, Multi Dimension Sensitivity Analysis like Vector Bounded Region or the Triage method can be conducted to gain further insights.
- This value hierarchy may be compared to models already in vogue for the SSTRO in Afghanistan and a new hierarchy and mathematical model may be developed.
- The same model can be used as an assessment tool with more data.
- Simulation techniques can be used to analyze the long-term performance of the data and the model and to generate data to validate and verify the theoretical model.
- The model may be used by agencies involved in SSTRO in Afghanistan to assess their progress in their specific areas on specific time intervals, this will help in achieving optimal results.

Appendix A. Measures Document

Introduction

The VFT analysis for this thesis can be better understood and executed later on after getting an insight into the philosophy behind the selection and scoring of the measures. It is believed that all the attributes are mutually exclusive and collectively exhaustive as they are defined for this value hierarchy. The hierarchy meets the standards of operability and is easy to use and

understand and this is the minimal set of attributes that captures the values of the DM. A top down approach was used for weighting. This appendix explains the rationale for selecting measures and then identifies the scheme of scoring as per the directives of the DM.

Security

The security hierarchy is displayed in Figure A 1. The security was given a weight of 0.182 by the DM, making it equal to education and twice as important as social well- being.

The next tiers of Public safety, Minimizing extremist threat and Military were allocated weights of 0.045, 0.045 and 0.091 respectively out of the total security weight of 0.182.

Public Safety

Public safety was subdivided into freedom from terrorism, secure business and safe travel. It will be pertinent to discuss the measures and the SDVF for these attributes separately.

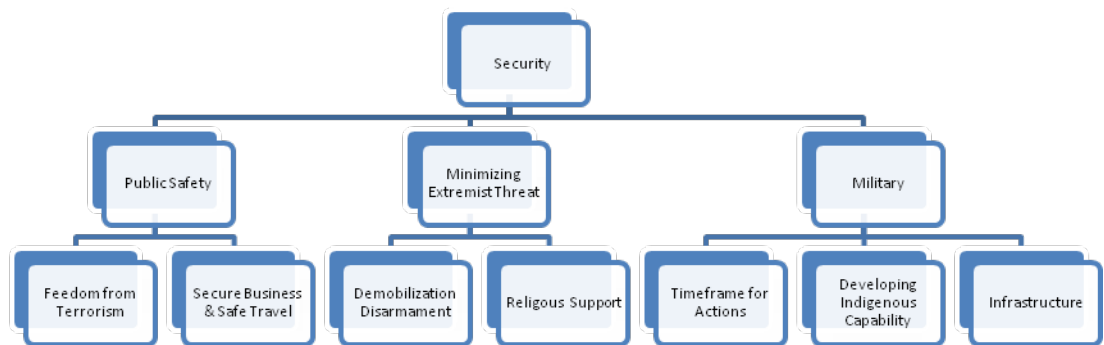


Figure A. 1 Security Hierarchy

Freedom from Terrorism

The number of suicide bombing conducted in Afghanistan was chosen as an appropriate measure to represent freedom from terrorism. The DM suggested that the present number of suicide bombing in Afghanistan during 2009 was 180 which were exceptionally high compared to 129 bombing during the year 2007. Therefore, he suggested that reducing these bombing to zero shall fetch the perfect score of 1. The DM, mentioned that anytime the number of suicide bombing were increased beyond 135, it shall be scored as zero. He also suggested that in his opinion reducing the number to 18 will have a value of 50% or 0.5 in terms of freedom from terrorism for the Afghani people. The graph displaying an exponential curve is displayed in Figure A 2.

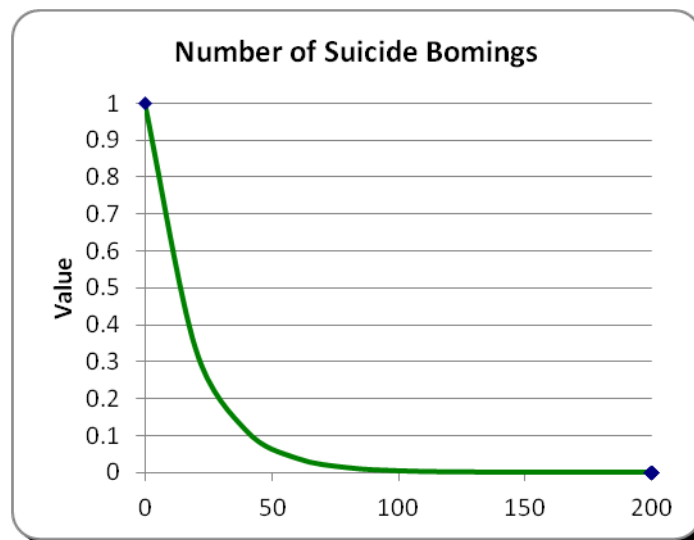


Figure A. 2 Value Function of Suicide Bombings

Secure Business and Safe Travel

The attribute was captured by selecting the number of people that fear for their life while conducting business and travel. The DM suggested that a perfect score of 1 in this measure will be when no Afghan fears for his life while doing business and travel. The current percentage of

56% Afghans having this fear was given a score of 0.19 by the DM. The SDVF of this measure is a piece wise linear function displayed in Figure A 3.

The different scores as suggested by the DM were plotted and the Figure A 3 reveals a relatively small gain in value till 40% people fear for their life. However, there is a significant gain for the next 25 % that's follows kind of an exponential distribution and the value jumps from 0.25 to 0.75. The DM mentioned that though the maximum benefit is achieved in the last 25% however achieving that number can be focused when other areas in the hierarchy like indigenous military capability and Disarmament could be achieved considerably.

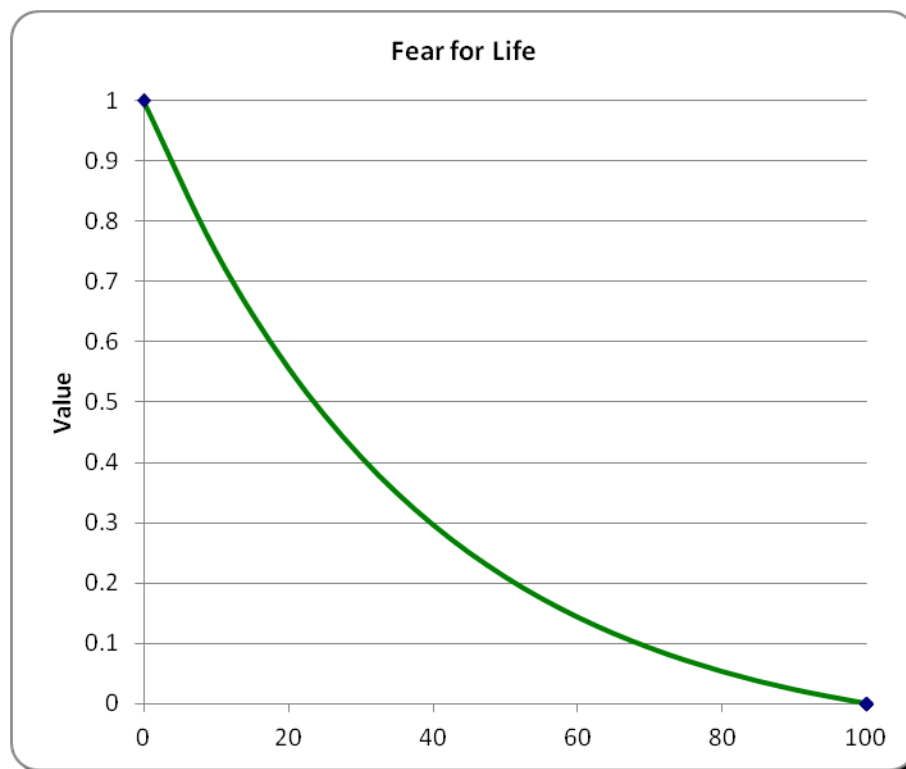


Figure A. 3 Value Function of Fear for Life

Minimizing Extremist Threat

The DM, stressed that Security in Afghanistan could only be achieved if the extremist threat to Afghani people could be minimized. He suggested a more intrinsic approach where militant

Afghanis could be persuaded through Religious Decree(Fatwa) to lay down arms and abstain from attacking the civilian unarmed population. The measures suggested by the DM included counting the number of people who had turned in weapons as part of DDR program. In order to gauge the religious support attribute, the DM opined that analyzing the people who had a soft corner for Taliban and militancy was an appropriate measure.

Number of Disarmed Demobilized and Reintegrated (DDR) personnel

A recent survey by Brookings Institute estimates presence of about 120,000 Afghans still in possession of illegal weapons. These Afghans are both insurgents belonging to different faction of militant groups and private armies kept by war lords and Drug Mafia in Afghanistan. DM highlighted a perfect score of 1 could only be achieved if everyone turned in his weapons and joined the DDR process. However as of 2011, only 63380 Afghans have laid down arms and joined DDR process. This figure was scored a 0.33 according to the DM. The SVDF for DDR process is shown in Figure A 4.

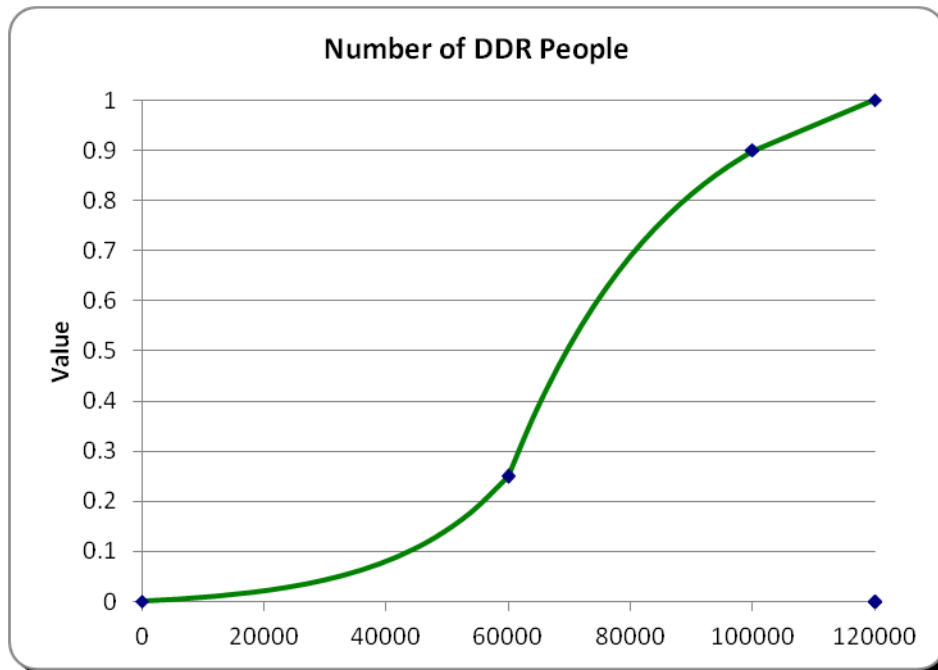


Figure A. 4 Value Function of DDR

Liking for Taliban

Similarly, if religious support could be gathered against insurgency and drug sales both of which are forbidden by Islam, the liking for Taliban are likely to reduce. This will help in gaining more grounds for the guerilla warfare which thrives on local support. The present liking for Taliban according to the survey lies 11%. The DM suggested that anytime if this liking dropped to 0%, that will be a perfect score of 1, but he highlighted that achieving that may not be worth the effort and the cost required. At the same time he suggested that if the liking increased beyond 25%, then people are not happy with SSTRO and see the ISAF as intruders. The SVDF graph is displayed in Figure A 5.

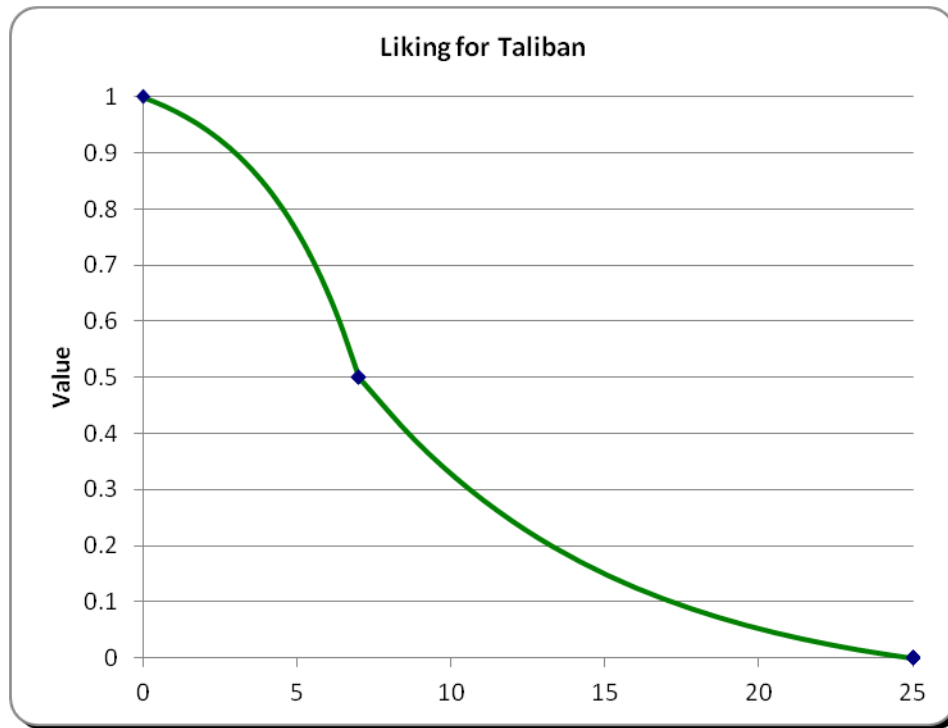


Figure A. 5 Value Function of Liking for Taliban

A closer look at Figure A 5 reveals little gains in value from 25% to 10%. The gains are made between 8% till about 4% beyond which it might not be cost effective. The current situation of 11% scores a 0.294 according to the DM's assessment.

Military

The third pillar to enhance security was the military as described by the DM. Military was weighted twice as important when compared with Public safety and Minimizing Extremist threat. The DM pointed out that developing Indigenous Military strength and developing Military Infrastructure was twice as important as the time table for withdrawal of foreign troops from Afghanistan.

Time table for Withdrawal of Foreign Troops

This measure was categorical as described by the DM. The three were absence of a time table which fetched a value of 0, a delay of up to 4 months in following the given time table was valued at 0.5 and implementing the given time table according to the mile stones set was valued at 1.

Indigenous Military Capability

This attribute was measured by the number of independent Afghan National Army (ANA) units. At present only 1 ANA unit is independent. The DM stressed that the value of initial 25% of units being independent was far more than that of last 25%. He suggested that as more ANA units became mission capable independently, the security is likely to improve and so will be the quality of training. Figure A 6 displays the concave curve for the independent ANA units; a significant trade off value for the first 80 units is evident in the graph.



Figure A. 6 Value Function of Indigenous Military Capability

Military Infrastructure

The military infrastructure was measured by a proxy measure, which was the amount of per capita US Dollar, spent on military infrastructure. Counting the number of bases for this measure was ruled out since there were a lot of temporary bases built by ISAF that varied in sizes and capacity. The current Afghan spending of 6.5 USD per capita was valued at 0.75 by the DM. He mentioned that spending over 7.5 USD per capita in this field might not be cost effective and was not a good tradeoff between dollars spent and the value gained. Figure A 7 displays the SDVF for this measure.

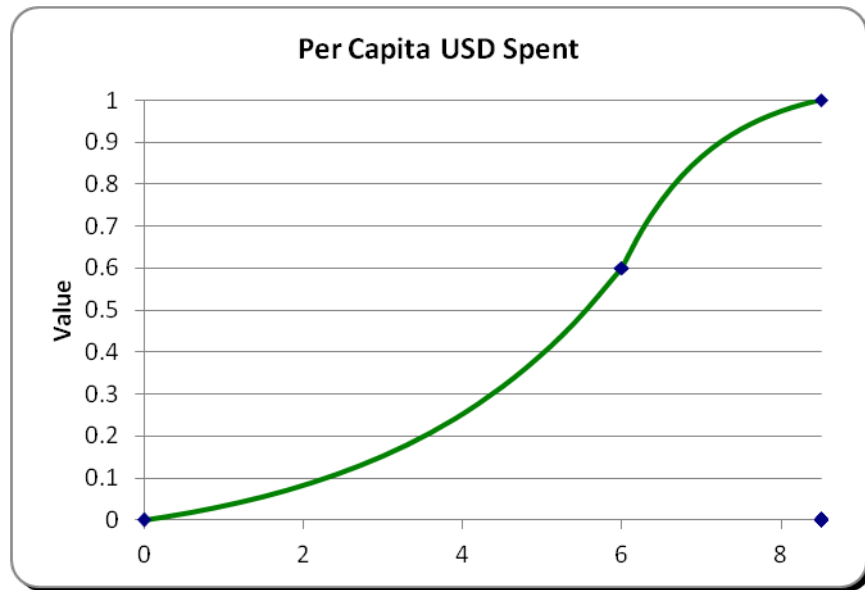


Figure A. 7 Value Function of Military Infra Structure

The other measures for the hierarchy are listed in the subsequent tables.

Scores for Relieve Suffering

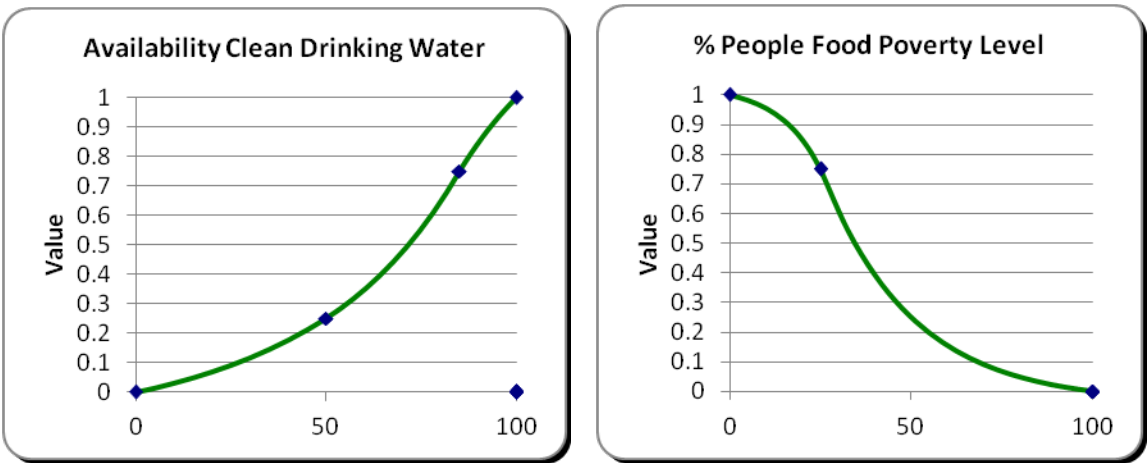
Utility	Base Line	Score of 0	Score of 0.5	Score of 1	Observation
Clean Drinking* Water (natural, direct) 2011	73% people have access	0% people have access	75% people have access	100% people have access	SDVF is convex, the bulk value lies in last 25%
Food Poverty Level* (natural, direct) 2011	45% people at food poverty level	100% people at food poverty level	35% people below food poverty level	0% people at food poverty level	The best value lies in between 50% to 20% people at food poverty level
Number of Shelters Constructed^ (natural, direct) 2011	8000 shelters constructed every year	No shelters are constructed	8000 shelters are constructed	15000 shelters are constructed	12000 shelter const/ year gives a value of 0.95, any more shelters construction

					may not be cost effective
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Table A 1 Scores for Relieving Suffering

* Indicates that the attributes are normalized for the population.

^ Shelters are one room shelters constructed under the supervision of UNHCR. One shelter is allocated to one family, Data for average number of people living in one shelter was not available.



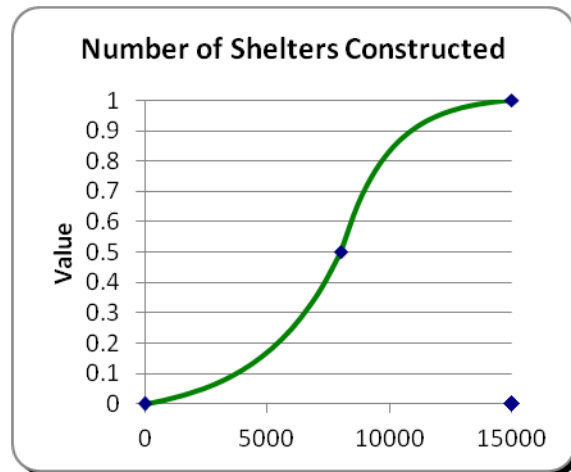


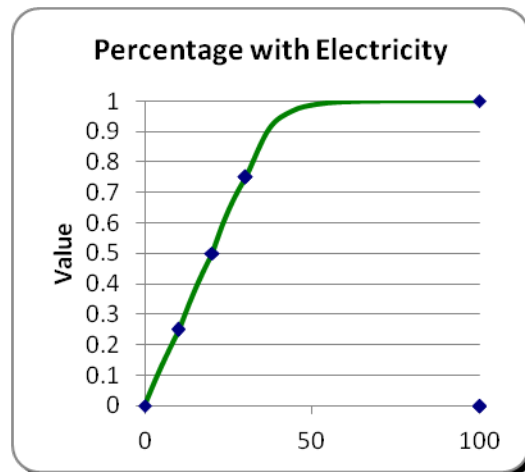
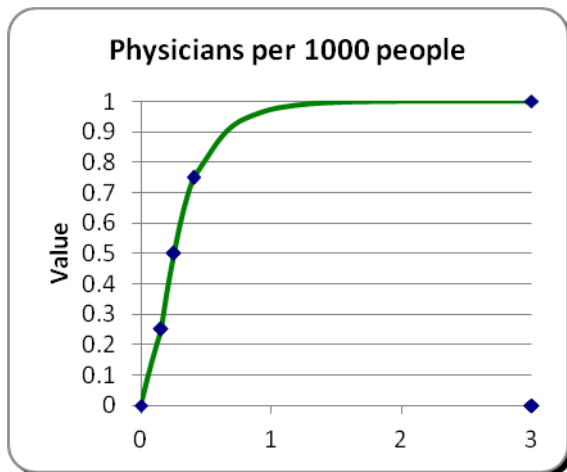
Figure A. 8 Value Functions of Relieve Suffering

Scores for Sustaining Life

Utility	Base Line	Score of 0	Score of 0.5	Score of 1	Observation
Number of Physicians per 1000 people (natural, direct) 2011	0.14 Physicians for every 1000 people	0 physicians per 1000 people	0.25 Physicians per 1000 people	1.7 physicians per 1000 people	The best tradeoff is 0.65 physicians /1000 people. Beyond this little value is achieved
Power (natural, direct) 2009	7% Population has access to Electricity	0% Population has access to electricity	20% Population has access to electricity	80% Population has access to electricity	Giving electricity access to more than 50% does not yield much value in SSTRO

Public Transport (natural, direct)	0 Motor Vehicle per 1000 people	0 motor vehicles per 1000 people	0.5 motor vehicles per 1000 people	6 motor vehicle per 1000 people	Exponential SDVF. Efforts shall be allocated for achieving 2 veh/1000 people
Communications (natural, direct)	40% people have access	0% people have access	70% people have access	100% people and less have access	SDVF is a convex curve. More value lies in last 30%
Waste Management (natural, direct)	12% people have access to sanitation	0% people have access to sanitation	25% people have access to sanitation	100% people and less have access to sanitation	SDVF is a concave curve, the best value lies in giving sanitation to 60% people in SSTRO

Table A 2 Scores for Sustaining Life



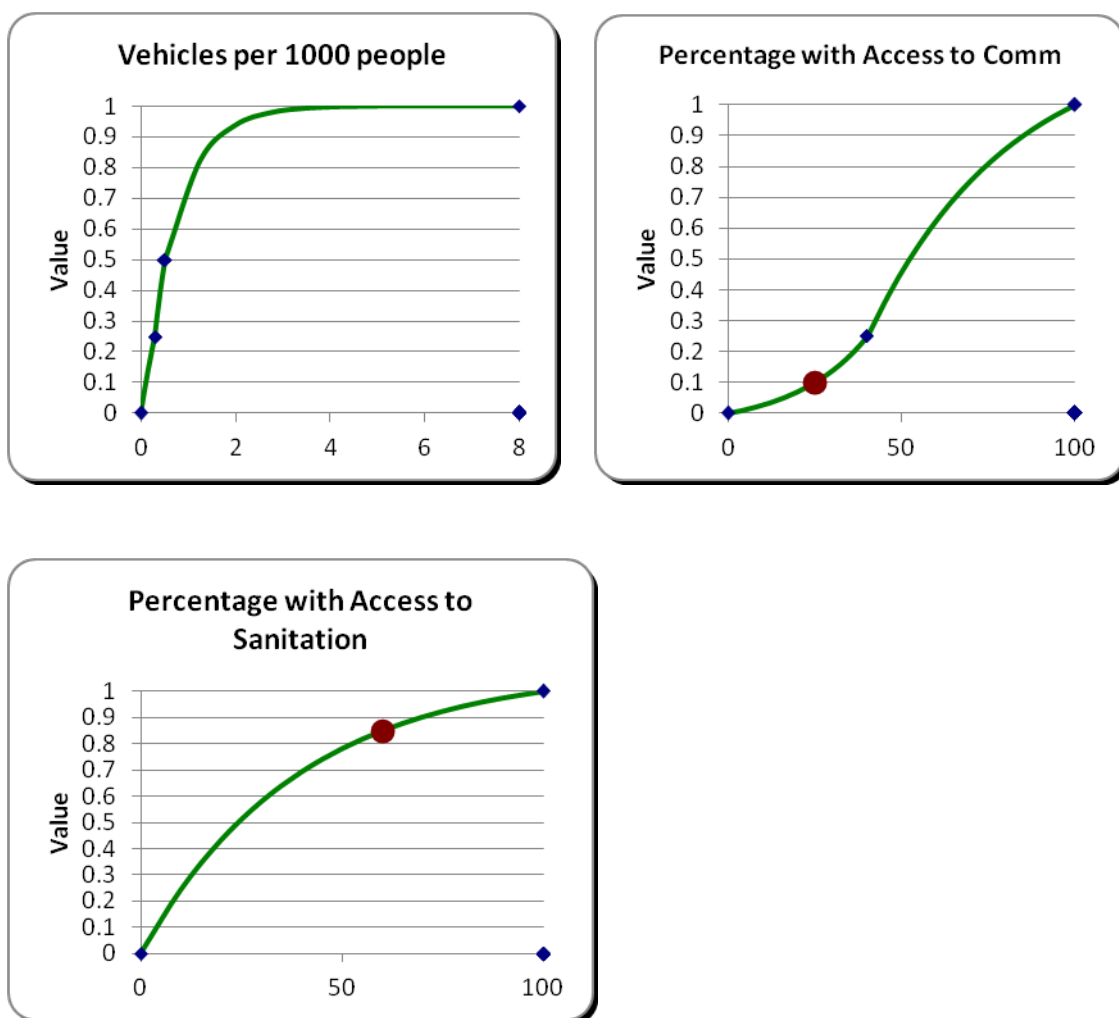


Figure A. 9 Value Functions of Sustaining Life

Scores for Education Policy

Measure	Base Line	Score of 0	Score of 0.5	Score of 1	Observation
Number of Essential Focus Areas (Discrete,natural, direct) 2011	3 Essential areas	0 Areas declared for focus	4 areas focused in education sector	8 areas focused	SDVF is a convex curve. The better trade off is achieved when max areas are focused
Incentives for education (natural, proxy)	13% Children are engaged in Child labor	100% Children are engaged in Child labor	6% Children are engaged in Child labor	0% Children are engaged in Child labor	An exponential SDVF. The real benefit lies in the last 10% of

2009					children being stopped from child labor
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Table A 3 Scores for Education Policy

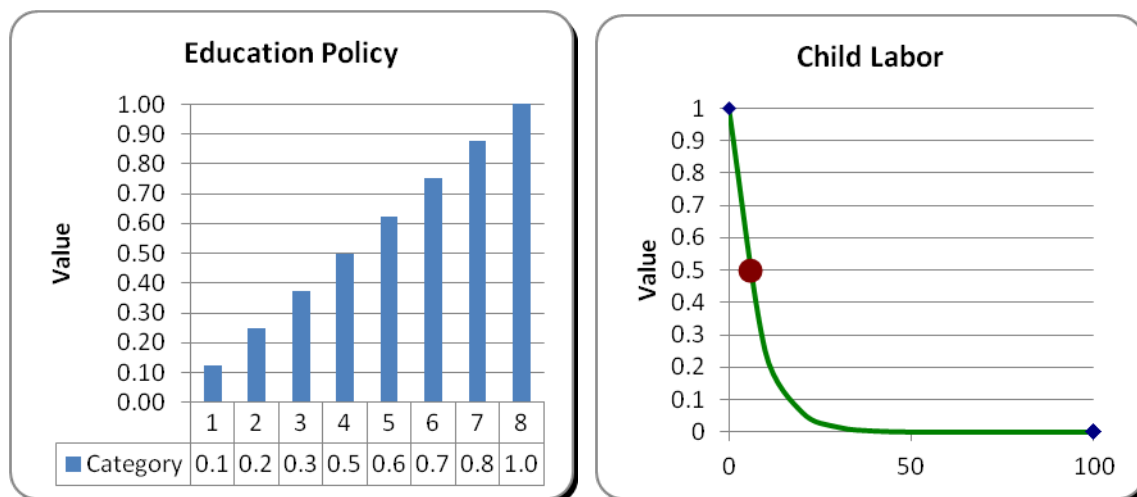


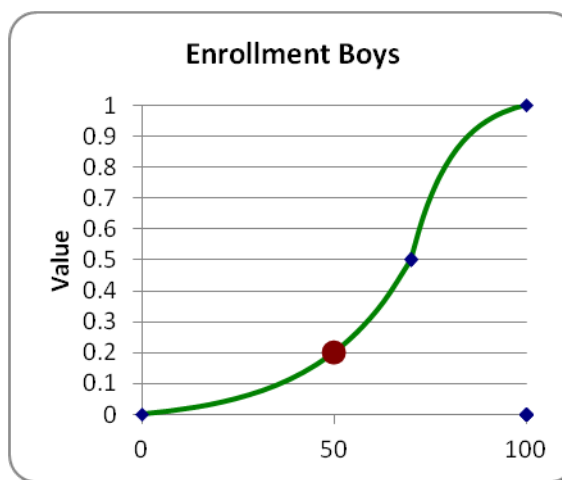
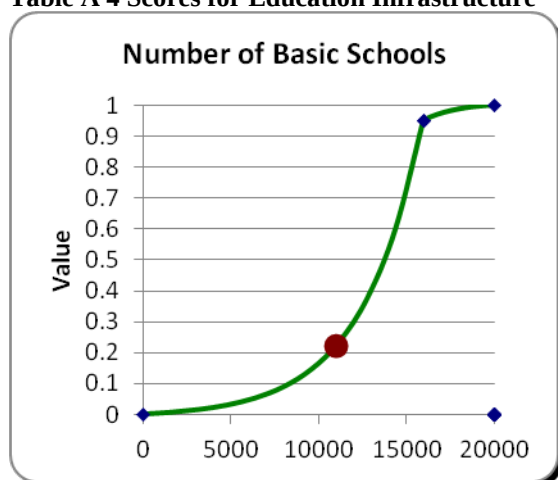
Figure A. 10 Value Functions of Education Policy

Scores for Education Infrastructure

Measure	Base Line	Score of 0	Score of 0.5	Score of 1	Observation
Number of Basic Schools (natural, direct) 2011	11000 schools	0 schools for students	13800 schools for students	20000 schools	SDVF is an increasing return to scale initially however later when schools beyond 16000 limited value is achieved
Enrollment rate, Boys (natural, proxy) 2011	65% Boys are enrolled at present	0% Boys are enrolled in schools	70% Boys are enrolled in schools	100% Boys are enrolled in schools	SDVF is an increasing return to scale initially however later when enrollment rate reaches 85%

					limited value is achieved
Enrollment rate, Girls (natural, proxy) 2011	40% Girls are enrolled at present	0% Girls are enrolled in schools	60% Girls are enrolled in schools	100% Girls are enrolled in schools	SDVF is an increasing return to scale since girls education has long been neglected
Professional Institutions					
Enrollment rate at Professional Institutions (natural, direct) 2011	19,500 students enrolled in 2011	No enrollment	60000 students are enrolled	150,000 students are enrolled	SDVF is diminishing return to scale, since this aspect is so low that it DM sees value right through it
Number of Professional Institutions (natural, direct) 2011	44 Institutions	No institutions are present	250 institutions are developed	500 institutions are developed	SDVF is diminishing return to scale, since this aspect is so low that it DM sees value right through it
Staff Training					
Staff Training (natural, direct) 2011	40% staff is trained (2011)	No Trained staff	60% Trained staff	100% staff is trained	SDVF is an increasing return to scale, with a plateau at 85%

Table A 4 Scores for Education Infrastructure



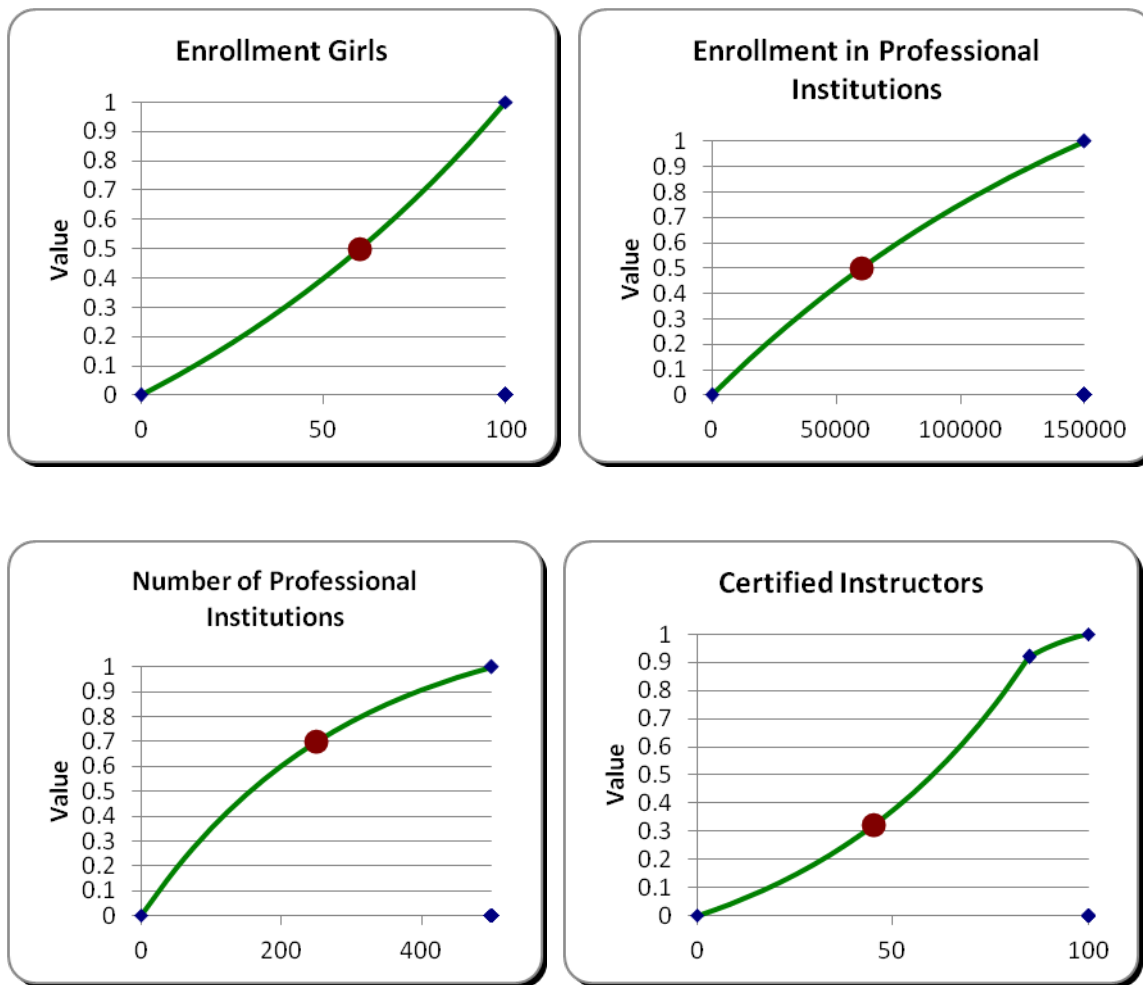


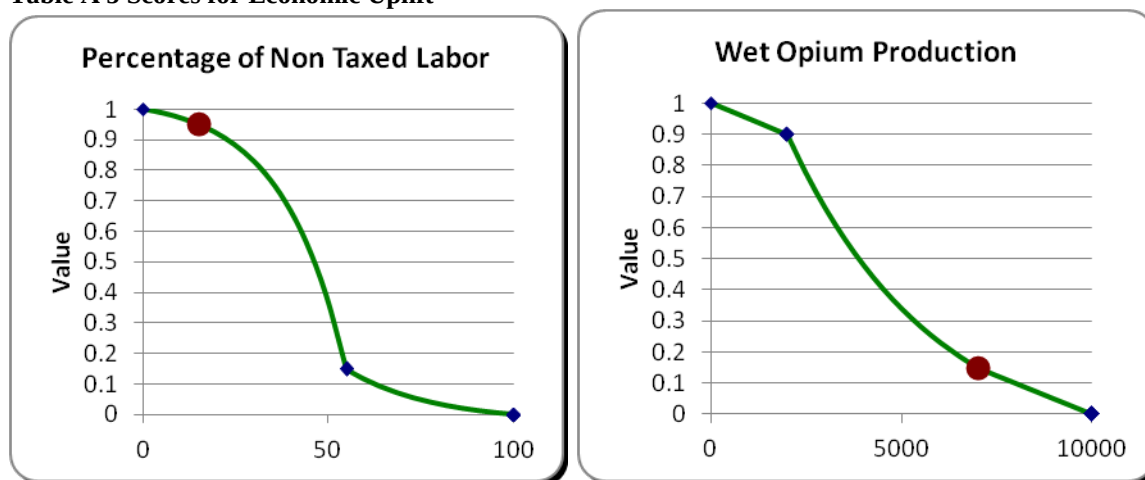
Figure A. 11 Value Functions of Education Infra structure

Scores for Economic Uplift

Measure	Base Line	Score of 0	Score of 0.5	Score of 1	Observation
Economic Crime					
Grey Economy (constructed, proxy) 2011	55% of Non taxed labor	100% of Non Taxed labor	46.5 % of Non Taxed labor	0% of Non Taxed labor	SDVF has little value till 55%, the ideal trade off is between 50% to 15%
Black Economy (constructed, proxy) 2011	6900 Tons of wet opium production	10,000 Tons of wet opium production	4000 Tons of wet opium production	0 Tons of wet opium production	Getting the production down to 2000 Tons has maximum value as per the DM
Economic Development					

Economic Policy (natural, direct) 2011	Policy is present but little implementation	No Economic Policy	Policy Not Implemented fully	Full implementation of Policy	This SDVF is categorical
Macro Economic Fundamentals (constructed, proxy) 2011	GDP Real growth rate, currently at 8%	0% Growth rate	5% Growth Rate	20% Growth Rate	SDVF is diminishing return to scale, since this aspect needs improvement considerably
Market Economy					
International Trade (constructed, proxy) 2011	Percentage value of Imports stands at - 16% presently	Percentage value of imports at -10%	Percentage value of imports 0%	Percentage value of imports at 10%	SDVF is a linear function
International Trade (constructed, proxy) 2011	Percentage value of Exports stands at - 20.6% presently	Percentage value of exports at -10%	Percentage value of exports 0%	Percentage value of exports at 10%	SDVF is a linear function
Private Sector (Proxy, Constructed) 2011	Products availability in market compared to last year, 30% presently	-50% Availability	12% Availability	50% Availability	SDVF is an increasing return to scale, best trade off till 30% availability
Economic Intervention					
Economic Intervention (Proxy, Constructed) 2009	Ratio of Govt Revenue to Foreign Aid, currently at 21%	100% Revenue comes from foreign aid, ratio of 0	15% Revenue comes from foreign aid, ratio of 0.85	0% Revenue comes from foreign aid, ratio of 1	Exponential SDVF, the best tradeoff between 30% to 0%

Table A 5 Scores for Economic Uplift



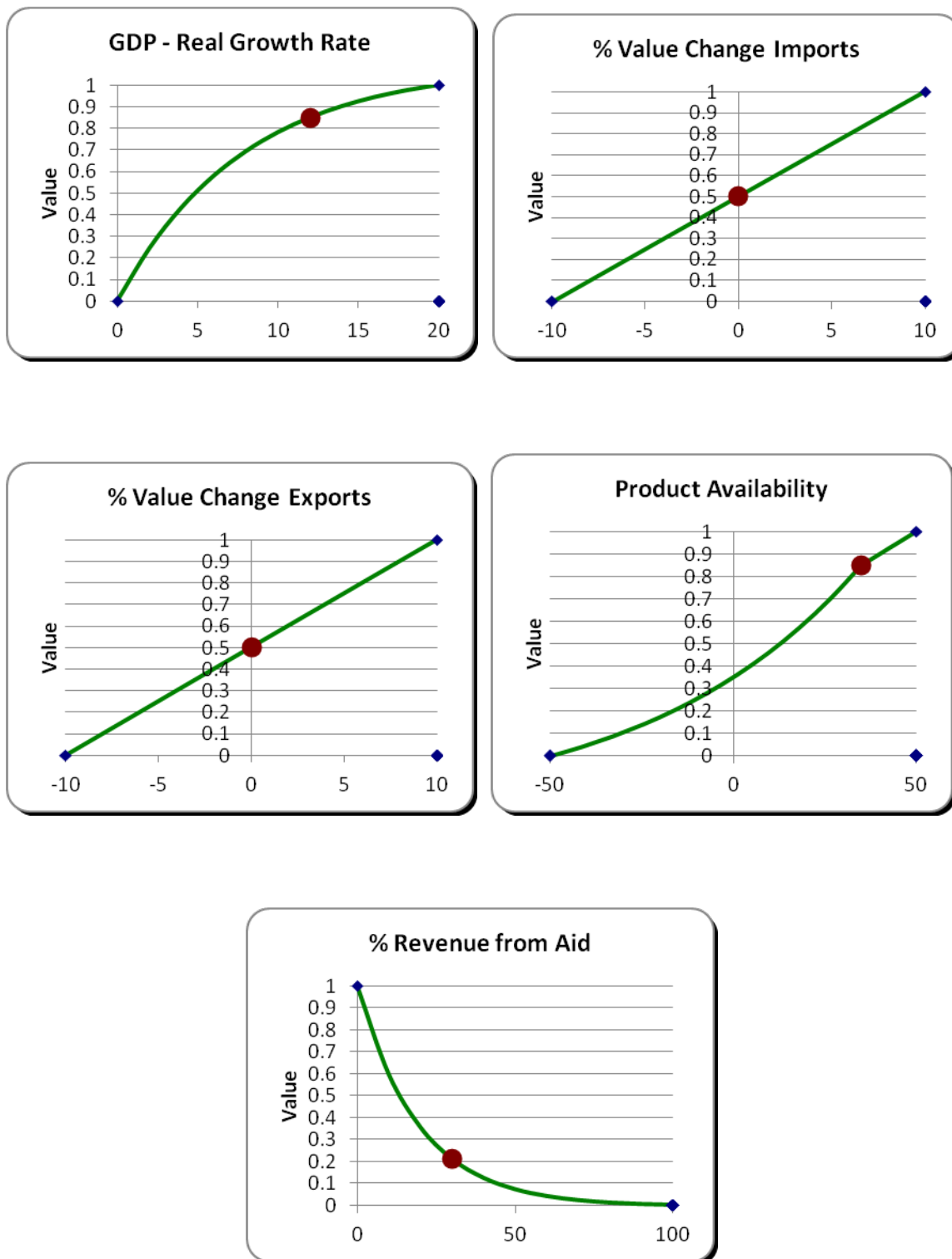


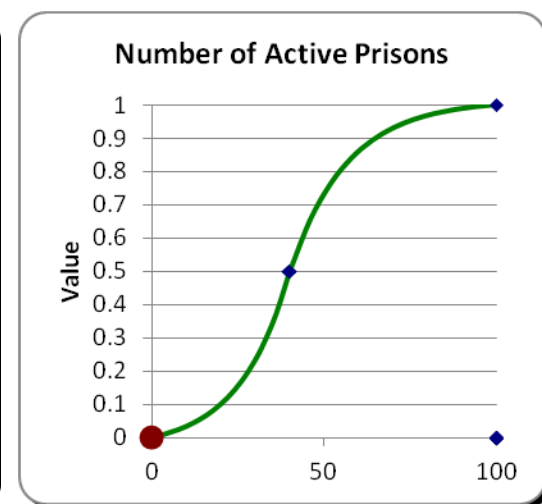
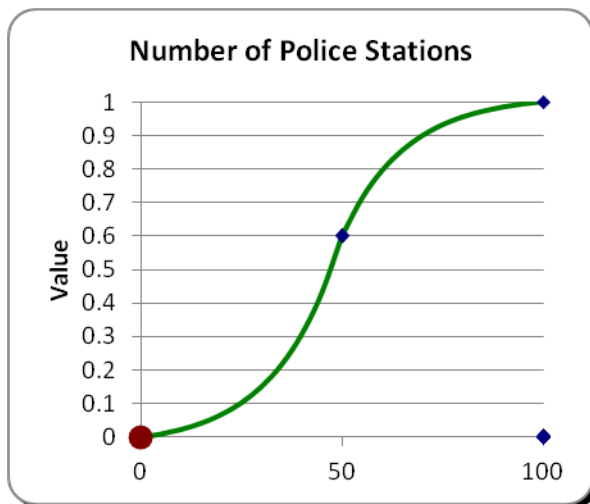
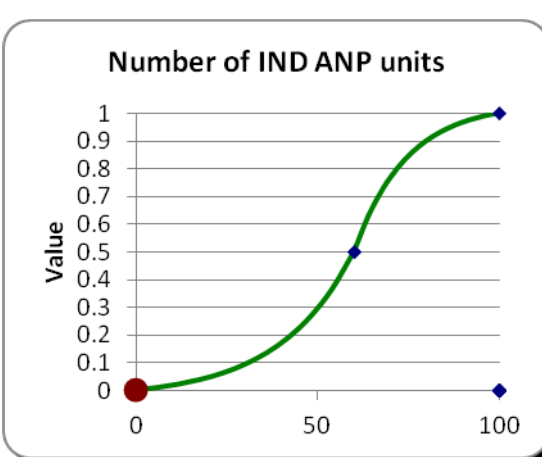
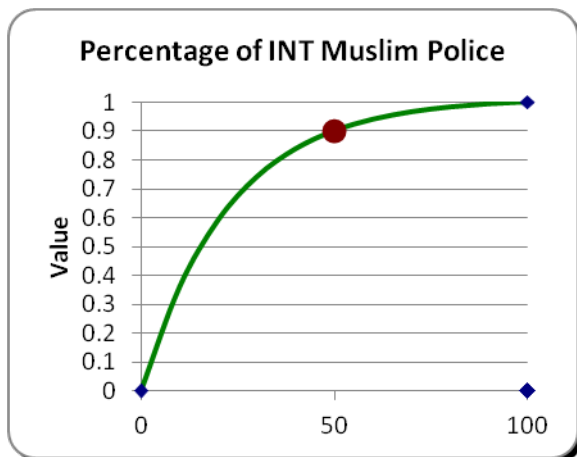
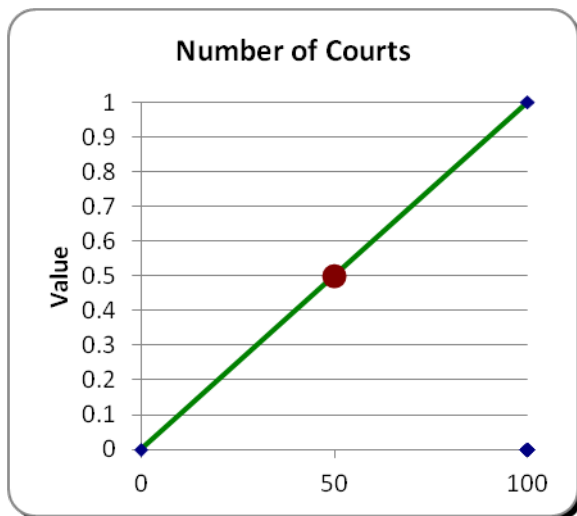
Figure A. 14 Value Functions of Economic Uplift

Scores for Justice

Measure	Base Line	Score of 0	Score of 0.5	Score of 1	Observation
Judicial System					
Published Afghan Law (constructed, proxy) 2011 (Categorical)	No Afghan law is published and available	No Afghan law is published and available	Afghan Law is published and available to courts partially	Afghan Law is published and available to courts and implemented totally	A categorical measure as defined by DM, uniform law needs to be practiced across country
Establishing Courts (natural, direct) 2011	25% of courts are working and delivering justice	0% courts are working effectively	50% courts are working effectively	100% courts are working effectively	A linear SDVF. The DM believes that at least an effective court must be developed in each district
Qualified Staff (natural, direct)	Presently 25% staff is qualified in shariah,	0% staff in courts is	41% staff in courts is	100% staff in courts is	SDVF is an S curve, little value for

2011	tribal or Afghan Law	qualified and trained	qualified and trained	qualified and trained	initial 30 % and also the value decreases for last 25%. The focus areas is 30% to 75%
Law Enforcement					
Interim Solution (constructed, proxy) 2011	Presence of International Muslim Police for Law Enforcement, presently none	No presence	Limited presence especially in troubled areas	All international police are Muslim	SDVF is a diminishing return to scale, the maximum value lies in first 50% making it more symbolic for Afghans
Indigenous LE Capability (natural, direct) 2011	Number of Independent ANP units, presently none out of 335 units	No ANP units are Independent	60% ANP units are Independent	100% ANP units are Independent	SDVF is increasing return to scale, since this aspect needs improvement considerably, it flattens out later
Indigenous Infra structure (natural, direct) 2010	Confidence of Afghans in ANP. 81% Afghans have faith in ANP	0% Afghans have faith in ANP	70% Afghans have faith in ANP	100% Afghans have faith in ANP	SDVF is an increasing return to scale
Corrections System					
International Trade (constructed, proxy) 2011	Percentage value of Imports stands at -16% presently	Percentage value of imports at -10%	Percentage value of imports 0%	Percentage value of imports at 10%	SDVF is a linear function
International Trade (constructed, proxy) 2011	Percentage value of Exports stands at -20.6% presently	Percentage value of exports at -10%	Percentage value of exports 0%	Percentage value of exports at 10%	SDVF is a linear function
Private Sector (Proxy, Constructed) 2011	Products availability in market compared to last year, 30% presently	-50% Availability	12% Availability	50% Availability	SDVF is an increasing return to scale, best trade off till 30% availability
Economic Intervention					
Economic Intervention (Proxy, Constructed) 2009	Ratio of Govt Revenue to Foreign Aid, currently at 21%	100% Revenue comes from foreign aid, ratio of 0	15% Revenue comes from foreign aid, ratio of 0.85	0% Revenue comes from foreign aid, ratio of 1	Exponential SDVF, the best tradeoff between 30% to 0%

Table A 6 Scores for Justice



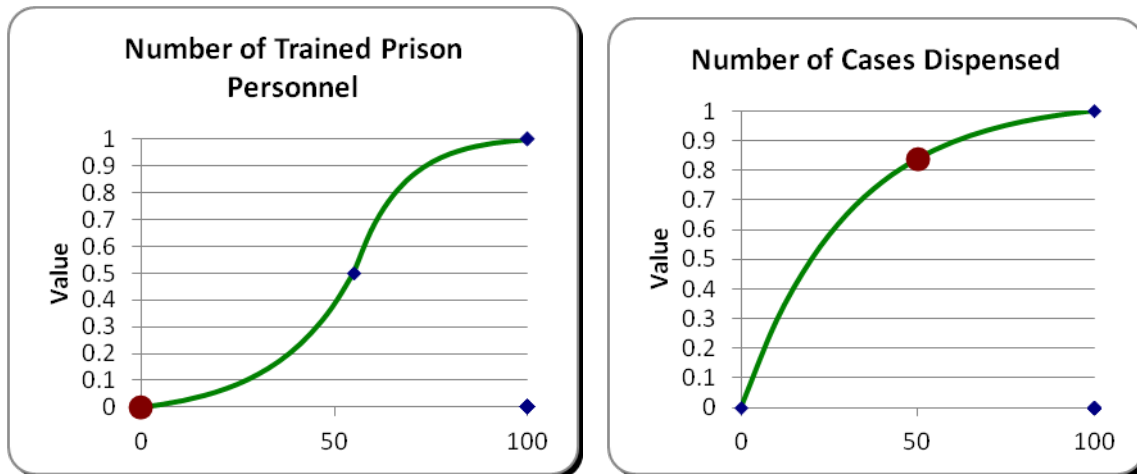


Figure A. 12 Value Functions of Justice

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14. ABSTRACT This thesis is an effort to mathematically model the nation building effort in the in Afghanistan. The difference that I intend to make from the work of my predecessors on the similar topic is to address the problem from a local person's perspective who understands the culture better than a foreigner. The thesis focuses on developing a hierarchy on the areas that need to be focused on and that will have a far more significant and immediate impact on the masses. This, in turn will be enable us to fight terrorism through educating the people who till now feel neglected. At the same time the humanitarian efforts will be in synchronization with Islamic and cultural principles of Afghanistan that shall improve the impression of Westerners in the hearts and minds of the people and thus will be able to achieve a quicker and more decisive victory in the global war on terror. On a technical note this thesis employs value focused thinking to categorize the factor in descending order of priority that we need to focus on for nation building. This work adds a new dimension to the models already available in the field and is likely to be more readily embraced by the local people who at times are in conflict with American priorities. Choosing the right areas through the scientific approach of value focused thinking with a Pashtun Decision Maker also helps in allocating weights for specific areas thus contributing in better and more effective utilization of tax payers money that would bring peace and prosperity more swiftly and help build a more stable region which is our ultimate desire.					
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