Challenges in Incorporating Social and Behavioral Aspects into Intelligence Community Assessments

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The United States Intelligence Community (IC) provides invaluable support to the Nation's leaders in regards to threats and activities that can impact National Security. The threats and activities are driven by various actors (e.g., individuals, states, or groups) and their motivations can be a direct result of or in response to social or behavioral factors. Understanding the role that social and behavioral drivers play in shaping the threats and activities that can impact National Security will improve the analytical products generated by the IC, thereby providing better information for decision makers.

This White Paper is submitted in response to the Call for White Papers issued by The National Academies of Sciences, Engineering, and Medicine Board on Behavioral, Cognitive, and Sensory Sciences as a part of their decadal survey on social and behavioral sciences for national security. The purpose of this White Paper is to address some of the challenges associated with incorporating social and behavioral science aspects into operational IC assessments.

Assessing State Stability and Fragility

In a study conducted for the Center of Excellence for Disaster Management and Humanitarian Assistance (COE DMHA), Argonne researchers conducted a review of various methodologies and indicators used to assess state stability and fragility. The goal of that effort was to identify metrics and indicators that could be used to support regional resiliency assessments in the U. S. Pacific Command area of responsibility. The Argonne team concluded (Metz et. al., 2010) that:

- Few stability and fragility assessment approaches consider the role that the environment can play in state stability a factor that is now considered to have played a significant role in triggering the current civil war in Syria.
- The assessment approaches are focused on identifying the negative conditions in a country and ranking the countries as opposed to giving an objective state of affairs.
- The assessment approaches often involve proprietary or undocumented algorithms which makes it difficult to assess what a given value means from a "good" or "bad" perspective.

• No single assessment approach can give a complete view of the state of a given country or region and a systems approach is required to give a "whole of country" perspective.

In further work for the COE DMHA, the Argonne team noted that while many assessment approaches can be addressed with "yes" or "no" answers, there are critical context issues that can color a simple binary "yes or no" answer. An example can be given from a resiliency assessment Argonne did for Nepal using a framework developed for the COE DMHA. The framework included a number of questions relating to rule of law which were taken from assessment approaches used by the American Bar Association. One question asked if laws exist regarding domestic violence. For Nepal the answer was "yes;" however, further review determined that the laws were limited in scope and did not include marital rape. In addition, the country still had a cultural bias that did not condemn domestic violence. The net result of the additional context was that the basic answer to the question, which was originally quantified as a 1, was reduced in value to reflect the "yes, but..." realities of the issues regarding domestic violence in Nepal.

Challenges in Using Existing Measures

From an analytic perspective, the social and behavioral science factors lie in the "human landscape" in an operational area -1.) determining who the actors are that need to be engaged as decision makers, implementers, and those impacted by any actions taken; 2.) incorporating social and behavioral aspects into recommended courses of action; and 3.) developing assessments strategies of the effectiveness of actions taken.

Determining the actors is most likely the easiest one to address with the necessary data being available using conventional intelligence gathering techniques. However, many of the efforts that incorporate what actors have to be considered often leave out determining who are the groups that will ultimately be impacted by the actions – which is where the effectiveness assessments need to be performed.

Incorporating social and behavioral actions into courses of action can involve making fundamental changes in the social and cultural fabric of the operational area. The desired method to make the changes would be to encourage the affected groups to willingly change rather than imposing changes by fiat. This effort would require the involvement of appropriate subject matter experts (e.g., sociologists, anthropologists, etc.) to understand what kind of changes need to be made and how best to implement them.

Assessing the effectiveness of the actions taken, is the most difficult challenge for two reasons. The first is that the changes required in the social and cultural fabric can involve timelines that are typically larger than conventional operational timelines. As a result, the assessment approach should focus on trends as well as instantaneous metrics. The second reason is that it is difficult to directly and unequivocally measure the state of social and cultural constructs, such as the "rule of law" or "human dignity".

To demonstrate these challenges, we shall use an example of one National Security mission - to defeat extreme ideologies. Figure 1 is a representation of the functional concepts required to achieve this mission that is based on concepts originally developed by the Institute for Defense Analyses in 2009.

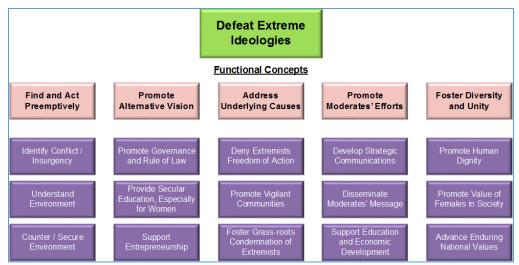


Figure 1. Functional Concepts and Activities Involved in Defeat Extreme Ideologies.

Each of the activities associated with the functional concepts involve proactive efforts. The first concept involves more conventional "kinetic" type of activities that would be conducted by military forces. The other four concepts are ones that involve the human landscape of social and behavioral issues that exist in the area being studied.

Under the "Promote Alternative Vision" functional concept in Figure 1 there is the activity "Promote Governance and Rule of Law." While there are numerous activities to assess the rule of law and governance, there are no accepted standards on how to measure it or even define it (United Nations, 2011.) In addition, many assessment approaches only result in qualitative outcomes, such as the country assessments conducted by the United Nations and the American Bar Association (e.g., American Bar Association, 2012 a, b, c, d, e.), which makes it difficult to develop quantitative values for analysis. The World Bank also has developed a set of six governance metrics (World

Bank, 2010, 2014) that assess countries on a scale of -2.5 to 2.5, with 2.5 being "good." The values are good from a trend assessment perspective, but have a limited value from a single value, snap shot assessment. This can be demonstrated in Figure 2 which shows the six World Bank Governance indicators for Syria for the years 1996 – 2015. In looking at the data for the "Political Stability and Absence of Violence/Terrorism" indicator, there is a major downward trend starting around 2010 that, literally, goes off the chart, exceeding the normal lower boundary value of -2.5. The downward trend is also seen in the "Government Effectiveness" and "Rule of Law" values. In looking at the data collectively, one could argue that the changes in the political stability and absence of violence/terrorism metric represent a precursor to the changes in the other governance factors.

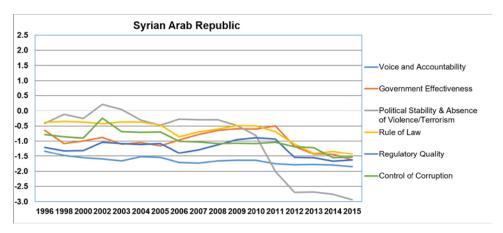


Figure 2. Syrian Arab Republic World Bank Governance Indicators for 1996 – 2015.

Being able to observe changes in the governance factors is helpful, but one would also want to understand what are the underlying causes in the country that are causing breakdowns in the rule of law. Again, using Syria as an example, it is now believed that a major drought in the 2000 - 2010 timeframe was a major factor in the development of the current civil war. The drought led to major crop failures which resulted in large migrations from the rural areas to the urban areas. Figure 3 shows data for Syria from the United Nations Food and Agriculture Organization (UN FAO) of the harvested area in hectares for cereals (top panel) and the total production in tonnes for cereals (bottom panel). These data show the impact of the drought beginning around 2006 and the impacts of its continuation. When these data are compared with the World Bank Governance data, the dramatic changes in the governance data lag the changes seen in the agricultural data by about three years. One could then infer that the agricultural data could have been used as a precursor to look for changes in other factors.

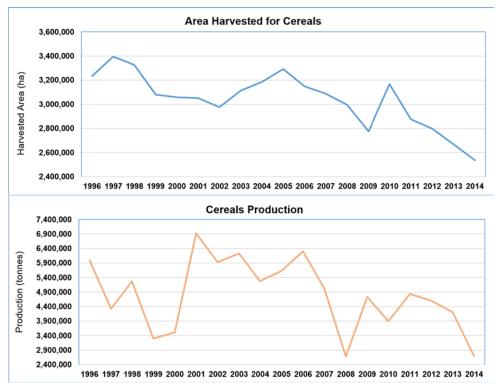


Figure 3. UN FAO Data for Syria for Cereal Products Showing the Area Harvested (top) and Total Production (bottom).

Conclusions and Recommended Way Forward

Many threats and issues impacting National Security are impacted by social and behavioral factors. These factors can be drivers for National Security issues (e.g., extreme ideologies) or be compounding factors (e.g., refugees). Many of these concepts are difficult to measure and quantify. Many assessment approaches exist, but utilizing their results can be a challenge because there are no standard methods on how to assess the "goodness" of the results. Instead, the trends over time may be a better method to understand the state of conditions.

Many of the social and behavioral concepts of importance to the IC are multi-faceted and no one single metric can provide the insight required. As a result, ensembles of data analyzed from a system-of-systems perspective are required.

Finally, knowing that changes have occurred are important, but being able to infer why they might have changed is also important because it can provide potential predictive ability for other regions in transition. It is then recommended that additional data of non-social and behavioral elements, such as environmental data, be incorporated into the analyses as they can be the drivers for social and behavioral responses of interest to the IC.

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