Introduction

Needs assessments. Vulnerability maps. Risk profiles. Advanced societies may have failed to take deliberate stock of assets, resulting in latent potential going untapped. In post-conflict contexts, focus is largely placed on the liabilities of the state. While important to charting a path forward, it gives one limited part of the context. Needs assessments and exercises are most often conducted by external stakeholders such as donor agencies or private consulting firms. In turn, analyses are inherently driven by a market rationale in which the solution to problems are the products and services of the external actor. While not intrinsically problematic, in practice, this seldom has the effects sought in the long term. Most notably, it fails to catalyze durable change and far-reaching impact for the country.

Rooted in its experience and expertise in state institutions, the Institute for State Effectiveness (ISE) has developed asset maps as a reframed perspective in which a country's assets and opportunities are recognized as tools of progress, not static demonstrations of value. By shifting the conversation, it recognizes internal actors and resources as critical catalysts for change and the foundational underpinning of state progress.

The following note provides a brief explanation of asset maps, outlines the value and objectives of the exercise, and proposes possible applications of the methodology of the outputs.

What is an ISE Asset Map?

An asset map is a comprehensive attempt to categorize, value, and monitor the tangible and intangible public and private assets in a particular area. Its scale can be nationwide, regional (two or more countries), or sub-regional (city, province, district, or village level), but its objectives and outputs remain the same. It is conducted in partnership with government and citizens to accurately document the resources of significance to a society, including social, cultural, environmental, physical, economic, and historical. There are three main outputs of an asset map:

- **The Registry**: The registry is the official database of all tangible and intangible assets. The registry includes pertinent information such as type of asset, location, ownership, etc. Similar to (though encapsulating more than) a land registry, an asset map registry has important implications for transparency and accountability. As such, blockchain technology can be considered for improving the security of the registry and the longevity of its records.

- **The Balance Sheet**: To measure a company’s viability and potential, both its profit and loss and its balance sheet of assets and liabilities are measured. In some instances, a “balanced scorecard” approach is used to gain an even deeper understanding of the potential, constraints, and capabilities of the firm. By contrast, countries measure their revenue and expenditure – equivalent to the annual profit and loss – but rarely take a systematic view of their balance sheet of assets and liabilities. A balance sheet would include liabilities such as environmental damage caused, together with constraints to the actualization of such assets.¹

- **The Map**: The map is a geographical visualization of the asset registry. The asset map allows for information to be visually represented, sorted and filtered. In addition, the geographic position of assets can be overlaid with indicator data such as poverty figures, population projections, road networks and soil erosion levels to enable better contextual analysis and strategic insight.

Objectives

The objectives of the asset map include:

- Shift focus from needs and gaps to assets and capabilities
- Document tangible and intangible assets securely and transparently to inform better decisions and prevent asset-capture

¹ For example, if mountains contain copper and aluminum ore of a value of $12 billion, lack of transportation infrastructure hampers development of mines, and building a connecting railroad between the mountains and a port will cost $300 million, then the lack of the railroad network, its cost, and relocating the labor force to a remote area would all be identified as constraints to the monetization of that $12 billion extractive asset.
• Shift focus from cash flow (revenue and budget in a one-year period) to a holistic consideration of all assets including those that have accrued in the past
• Shift focus from inputs and projects of one or more donor agencies to the holistic assets, capabilities, and constraints of national and external actors
• Understand the potential of assets that can be realized but are currently underperforming or not being realized or monetized at all
• Identify alignments (and misalignments) within the asset base, such as between extractive resources and human capital, or cultural capital and tourism
• Provide a basis for calculating return on investment (RoI) and risk profiles for actions and interventions taken
• Provide a basis for improved strategy formulation, intervention design, and stakeholder collaboration

Why is an Asset Map Needed?
• The undervaluing or underselling of existing state assets is a major issue in transitioning countries. Some states license, or sell, assets at undervalue. This is often because states fail to appreciate their assets’ true value or because corruption has prospered in the absence of transparency. An asset map uncovers and determines value. Because asset maps systemize this, failure to realize true value, whether by neglect or dishonesty, could be greatly reduced.
• The primary focus of asset maps is on what is there and the nature of the constraints or obstacles to using those assets to realize policy goals. An asset map identifies both assets and constraints in order to identify actions required to remove those constraints.
• An asset map can stimulate more imaginative approaches to existing assets. Lack of development may, in fact, constitute an asset in the context of recreation and tourism – by some measures the world’s largest industry.
• The asset map can be used as a basis for planning and strategy formulation; for regional integration planning; and for program and project design.

What Assets Are Categorized?
The diversity of assets within a state (or region) generally exceeds those of even the largest companies. Assets can range from the obviously physical, such as land, plant, and infrastructure, through to the less tangible, such as the granting of broadcasting or communication rights to the brand or image of the country itself.

One way to categorize assets can be according to the state’s management and regulatory functions. Following this approach, key categories include:
• Land and water: rights and allocation
• Natural capital, including extractive industries (oil, gas, and mining)
• Environment: quality of environment, capability of management and protection
• Industrial and commercial activities: licensing and regulatory framework, number and nature of ongoing concerns
• Public financial assets (including cash reserves and revenue) and available investment capital
• Human capital base in terms of skill levels of the population
• Infrastructure, including transportation, communication, energy, government, commercial, and housing stock
• Cultural and historical assets and actual and potential tourist attractions
• Rule of law and institutional and organizational capital, including state and civic organizations, and services including schools, universities, clinics, and hospitals
• Security conditions and capabilities

In some instances, for example the construction of a large hydro-electric power station, the project will cut across several of the above categories. Such a project will involve the regulation of waterways, the protection of the environment, and the regulation of industrial commercial activity. The construction of hotels in or around areas of natural beauty will also cut across several categories.

Culture and heritage are both physical and intangible and therefore hard to define but often very significant. Pilgrimages, carnivals, and ancient monuments all generate large sums for many nations. Shakespeare, though long dead, contributes more to Britain’s economy than almost any of its citizens who are still alive.

Calculating assets at the regional level is important as this dimension allows analysts to take into account costs and benefits of linkages (transportation, energy, water), which can only be realized with cross-country collaboration. Such linkages lay behind the creation of several regional initiatives that have helped to overcome security challenges, including in the Mekong, East Africa, and the EU.
Methodology

The methodology is purposefully adaptive to encapsulate unique assets in any context. Overall, conducting an asset map should include:

1) **Data Gathering:** Collecting information from formal (databases, land registries, etc.) and informal sources (surveys, citizen polls, interviews, etc.) for all ten categories of assets.

2) **Developing a taxonomy and coding structure:** The taxonomy used for the data categorization is incredibly important, as it informs the organization of the registry and enables filtering, sorting, and analysis. (A methodological note on creating a usable and valuable taxonomy can be provided upon request.)

3) **Codifying assets** by topical taxonomy, geographic attributes, and other features that can inform analysis and mapping.

4) **Designing outputs** in close conjunction with counterparts to ensure that the format, typology, and systems are congruent with country systems and culture.

5) **Beta-testing** the first set of outputs as a country asset map to ensure the correct methodology, typology, and structure.

6) **Constructing an initial country balance sheet,** including assets, constraints, challenges, and liabilities.

7) **Conducting an in-depth country asset map,** also including an internal and external stakeholder map.

Next Steps

Based on its R&D programs and fieldwork over the last decade, the ISE team has developed a framework and methodology for creating asset maps, for which it has completed initial pilots and now intends to launch a further phase of pilots in other countries. ISE has received requests to implement this approach from a number of country governments (e.g., Somalia, Haiti, Burundi) and to partner with a number of entities. ISE has also explored and developed partnerships with a range of technology partners which it will refine further as the work progresses. ISE is seeking partnerships, collaborations, and financial support to (i) refine its approach and employ appropriate technology relating to geographic information systems (GIS), data visualization software, decision analysis, blockchain, and use of big data, and (ii) implement the approach in a range of contexts.

Rwanda - Pre-Primary Schools, Road Networks, and Electricity Transmission Lines