Which forms of knowledge are most appropriate for informing and influencing policy-making? Are some types of knowledge more acceptable or suitable than others? These are questions that have been addressed by ODI’s Research and Policy in Development (RAPID) programme. Jones et al. (2009), for example, argued that traditional science and research are not well equipped to deal with the complexity of policy-making and development. The authors called, therefore, for multi-, inter- and trans-disciplinary research approaches for policy-influencing.

In this Background Note we aim to go one step further. We start by suggesting a way to classify different types of knowledge that aim to influence policy. We then use the classification to analyse case studies from three South-East Asian countries: Indonesia, the Philippines and Vietnam. We conclude with suggestions on the usefulness of the development of classifications – a taxonomy – of knowledge types.

The underlying proposition is that when we deal with complex processes, such as policy-making, a taxonomy of knowledge types can be a useful tool to help us organise, understand and access knowledge. On the one hand a taxonomy can help various knowledge producers (i.e. not only researchers) to present and communicate what they know and have learned. On the other, it can be useful for knowledge users such as policy-makers and bureaucrats to appreciate the value of a diversity of knowledge sources to inform their own decision-making (Pawson et al., 2003).

This Background Note is, therefore, an experiment. It suggests a taxonomy that we begin to flesh out with the analysis from the three country case studies about the simplification of administrative procedures. Two countries, Indonesia and the Philippines, have experienced military rule: Indonesia under Mohamed Suharto from 1967 to 1998 and the Philippines under Ferdinand Marcos from 1972 to 1986. Vietnam did not experience such dictatorship but emerged from decades of war in 1975 and in 1986, under the leadership of the Communist Party, started the Doi Moi reform which included a gradual transition to a market oriented economy.

All three countries have enjoyed rapid economic and population growth rates following the 1997 Asian economic crisis. This has left their governments struggling with the typical challenges of the transition of a country from low- to middle-income status: growing income inequality between urban and rural areas, unequal access to basic services for all citizens, how to attract foreign investment and promote small and medium enterprises, and how to prevent the emergence of ethnic tensions.

To respond to these challenges all three countries have undertaken wide ranging public administration reforms to enhance the effectiveness and efficiency of service provision to reduce transaction costs in public administration procedures and respond to the demands of their citizens for greater participation in decision-making processes.

First, let us turn to the characteristics of the taxonomy of knowledge types that will be informed by the case studies.
Towards a taxonomy of types of knowledge

In his book *Simply Complexity*, Neil Johnson (2009: 4) writes that ‘at heart of most real-world examples of Complexity, is the situation in which a collection of objects are competing for some kind of limited resources – for example, food, space, energy, power, or wealth’.

Real world policy-making is characterised by a similar complexity. As noted by Davies (2004) various factors (i.e. objects in Johnson) influence government policy-making: lobby groups, professional experience, political ideology, resources, values and research-based knowledge. When specific policies are discussed or implemented these factors/objects compete for limited resources, including the time that policy-makers usually have, and the limited number of key policy-makers who have the power to influence specific policies.

For those of us working on evidence-based policy-making, the perennial question is, therefore, how to make knowledge stand out and influence the process. We want to show that it is acceptable to draw on research-based knowledge as well as other types of knowledge, including tacit knowledge, by developing a taxonomy of knowledge types.

Taxonomies have an ancient history. One of the first organised catalogues of knowledge was developed for the library in Alexandria in Egypt, during the 3rd to 1st centuries BC. The French philosopher and writer Denis Diderot (1713-1784) co-founded and was the chief editor of the *Encyclopédie*, in which he wanted to incorporate all of the world’s knowledge and make it available to the public and to future generations.

However, taxonomy became a subject in its own right only in the 18th century, thanks to the Swedish botanist and zoologist Carl Linnaeus who, in his *1735 Systema Naturae*, created a controlled nomenclature of living organisms based on a binomial Latin naming system and a hierarchical and nested tree structure to express genealogical relationships. The taxonomy developed by Linnaeus, which is based on hierarchy and a tree structure, has been proven to suit different domains of human knowledge (Pellini and Jones, 2011).

Contrary to some perceptions, taxonomies are flexible tools that can be very helpful in organising and categorising ideas and concepts. Working with and through taxonomies does not mean trying to find ‘the’ taxonomy that is correct for everyone. Instead, it is about experimenting and developing an understandable classification to suit specific purposes. In this Background Note we have applied these principles with knowledge types aimed at policy-influencing (Figure 1).

One key breakthrough has been the definition of evidence-based policy provided by the Centre for Education Research and Innovation (CERI), created in 1968 under the OECD’s Directorate for Education’s Section on Research and Knowledge Management to promote studies on research, innovation and knowledge management: ‘the conscientious and explicit use of current best evidence in making decisions and choosing between policy options’ (Milani, 2009: 34).

This definition provides a first level of classification of knowledge types: evidence-based policy research

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**Figure 1: A taxonomy of knowledge purposes**

- **Academic research**
  - Proactive assessment and trouble shooting
  - Program and organisational development
  - Oversight, monitoring and compliance
  - Evaluation of programme effectiveness
  - Circulation of tacit wisdom for practical decisions
  - Testing social science theories

- **Methods-based research**
  - Policy research
  - Source-based research
  - Purpose-based research

- **Source-based research**
  - Circulation of tacit wisdom for practical decisions

- **Purpose-based research**
  - Testing social science theories
that aims to inform action, and academic research that can be defined as scientific research to develop theory and test hypotheses. While these two types of knowledge differ, they are not mutually exclusive and both can help to make policy more evidence-based.

Pawson et al. (2003) offer an additional level of classification of knowledge types for policy-influencing. They distinguish between the following:

- **Methods-based knowledge**: different research methods result in different types of knowledge. Social work research, for example, produces knowledge that differs from evaluation research or action research. However, for Pawson et al., this method-based category of knowledge is problematic in that it is difficult to include tacit forms of knowledge in this category.

- **Source-based knowledge**: in this category knowledge types are classified according to their source, including policy-makers, practitioners, users, managers or researchers.

- **Purpose-based knowledge**: different types of knowledge are produced by conducting research with different purposes in mind, such as identifying problems, developing solutions, devising and fine-tuning interventions, overseeing their implementation, or assessing their impact. The advantage of considering a purpose-based classification in terms of evidence-based policy-making is that it extends beyond research-based knowledge and allows the inclusion of tacit knowledge. Importantly, it can help to define qualitative standards in terms of what factors make a knowledge type ‘fit for purpose’.

Pawson et al. (2003) go one level deeper by defining specific purposes for knowledge production:

1) **Proactive assessment and trouble shooting**: this category includes knowledge generated to assess needs, identify problem sources and chart existing practices.

2) **Programme and organisational development**: knowledge is produced through activities to clarify, improve and develop ongoing practices or policies.

3) **Emancipatory research and promoting users’ control**: empowerment of users by adopting their values and changing oppressive structures.

4) **Oversight, monitoring and compliance**: information management and benchmarking, auditing and regulating provision.

5) **Evaluation of programme effectiveness**: formal research to discover what works, why, when and how.

6) **Circulating tacit wisdom for practical decisions**: promoting skills, reflexive judgement and active decision-making through sharing experience and trainings.

7) **Testing social science theory for knowledge development**: generating concepts and general propositions to enlighten the policy community.

It is important to remember that these categories are not intended to be a simple checklist and they do not replace judgement. But experimenting with their application, as we will see in the next section with the case studies from Indonesia, the Philippines and Vietnam, will help to assess their value in practice and identify what refinements they need.

**Indonesia: proactive assessment and evaluative knowledge and the development of One Stop Services**

At the end of 1990s, Indonesia entered a new era of decentralised governance when more power was transferred to local governments. Business registration of small and medium-size enterprises has been an important area of the reform, in line with the overall objective to simplify administrative procedures. Only registered companies are, in fact, eligible to access credit from formal lending institutions. This credit is a vital source of growth for such companies, which account for more than three-quarters of the total number of the companies in Indonesia.

The evidence suggests that the vast majority of these companies choose not to register, however, deterred by red tape. Typical barriers to registration associated to decentralisation reforms include: processing time and requirements; fees; and poor coordination between line agencies resulting in overlapping procedures, delayed completion, and higher costs (Steer, 2006).

One-stop-shops are a common approach to streamline and simplify administrative procedures. The idea is to provide a single point of contact to inform investors about the necessary steps to start or expand a business and speed up the granting of the necessary permits and licences. One-stop-shops also provide easy access to other information on legal and regulatory matters, on financing options, location choice, or recruitment and training. All of this saves time and money for potential investors.

The same aims apply to the One Stop Service (OSS) described here: a simplification of the licensing process that merges the tasks of different line agencies into one office (see Figure 2 overleaf).

The case of the OSS also provides an illustration of how governance reforms require time as they proceed to collect and analyse evidence from their trial and errors. Various policies and pieces of legislation have accompanied the OSS process in Indonesia. In the mid 1990s the licence-issuing offices were still
seen as part of the national government structure. Guidelines for the establishment of the OSS were introduced in 1998.

One-stop-shops have been through several changes in the 1990s. They were initially known as Unit Pelayanan Satu Atap (One Roof Service Unit). In these units the licensing officers from different technical agencies were in charge of processing various aspects of the licences. One advantage was that, rather than moving around various locations to get information, business owners could find the representatives of various line agencies in one office.

The OSSs have been established only when the approval of licensing has been located in one agency, the Dinas Perizinan Satu Pintu (Licensing Agency). With support from donors and as a result of the country’s improved investment climate, the number of cities with OSSs has increased from 29 in 2006 (JAN, 2006) to 341 as of February 2010 (ENG, 2010).

The expansion of this model has been achieved also through research conducted to assess its impact and identify problem sources in existing practices. Between 1999 and 2003, all districts and cities showed a steady increase in business registrations. In addition, according to the Asia Foundation study, OSSs were able to generate more revenues for the local government as a result of an increase in the number of applicants rather than an increase in fees per applicant. Furthermore, research by Transparency International Indonesia (2008) has shown that the perception of corruption was highly influenced by the efforts of the Anti-Corruption Commission and the local initiative for good governance in the form of an OSS. The study also shows that functioning OSSs have contributed to a more positive perception of the public towards local government.

Similarly, the Asia Foundation (2007a), which has had a programme to streamline business licensing in Indonesia since 1999, concentrating on the establishment of One-Stop Licensing Centers, has conducted an impact study on OSS that confirmed excellent results in six districts and cities.

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The OSS example shows that knowledge generated to identify problems as well as evaluate impact can contribute to the piloting and subsequent expansion of a useful governance innovation that results not only in a more transparent and accountable business environment but also in greater trust in government institutions.

### The Philippines: emancipatory knowledge and the circulation of tacit wisdom

The democratic spaces created in the Philippines after the fall of the Marcos regime in 1986 have allowed
for a tremendous growth of civil society organisations (CSOs). The most significant is the emergence of non-government organisations (NGOs) engaged in policy advocacy. Non-government think tanks existed even during the Marcos regime but they were largely excluded from the policy-making process, given the centralised and authoritarian nature of the regime (Villarin, 2004). In the post-Marcos years, these research and advocacy organisations re-framed their engagement with the government from a politics of resistance to one where alternatives are proposed (Alicias and Berja, 2005).

The Philippine Local Government Code of 1991 marked the official start of the decentralisation process by devolving substantial powers and functions to sub-national government units and opening spaces for the active engagement of CSOs in local governance. The devolution of powers and subsequent reconfiguration of local governance has increased the demand for locally-generated evidence, as citizens look to their elected representative for reforms that stimulate local development and accountable governance (Villarin, 2004).

The Barangay-Bayan Governance Consortium (BBGC) is a nationwide network of NGOs and reform-minded local government officials who embarked on a programme to maximise the spaces for citizens’ participation in local governance processes. The network’s flagship programme, the Barangay Development Planning through Participatory Resource Appraisal (BDP-PRA), combines participatory data-gathering techniques with planning methodologies. This enables bottom-up local development planning and the direct involvement of citizens in public decision-making.

The BDP-PRA process starts with a formal or informal agreement among various local stakeholders: local NGOs, community-based groups such as People’s Organisations, and local officials. Typically, a municipal technical working group is created formed by partner NGOs or People’s Organisations, the Mayor or a representative, a member of the Sanggunian (local legislative council), and the planning and development and budget municipal officers.

This technical working group designs the operational plan for the BDP-PRA. Participants in the BDP-PRA workshops typically include the Mayor and other elected local officials, the local NGOs and People’s Organisation representatives, the village health workers, and other influential people in the community, such as parish priests, teachers and local business people.

These working groups are usually sub-divided into smaller groups that deal specifically with the agrarian sector, the industry and development financing, infrastructure development, human resource development, land use, and development administration. These sub-groups map the needs and resources of the barangay – the smallest administrative unit in the Philippines – in relation to the six sectors.

For data-gathering, the participants are divided according to social, economic, political, environmental, cultural, and gender themes. The analysis and prioritisation of the data gathered uses materials available locally, narratives from local residents, and participatory tools such as a problem tree analysis.

Following the analysis, the barangay’s vision statement is drafted and the development plan maps out a strategy to achieve that vision through specific objectives and projects. The last part of the BDP-PRA process is a three-day ‘writeshop’ at the end of the planning activities, which helps to summarise the outputs. Follow-up activities include setting up project management committees, the formation of a municipal technical working group, and the organisation of participatory resource mobilisation activities.

The institutionalisation and replication of the BDP-PRA process have been made possible through demonstrations and visits, legislative acts, and the commitment of local Mayors. The innovation relies heavily on the political will of incumbents to engage with citizens and civil society as well as being open to their opinions, ideas and knowledge. The process can, therefore, enable citizens’ participation and help to unearth tacit knowledge that can contribute to more relevant local development plans.

However, despite its successes in opening up spaces for participation and changing patronage-based governance processes, the BDP-PRA process faces challenges in scaling up. Its dependence on the political will of incumbent officials makes it vulnerable to changes at the end of the three-year electoral cycle. More importantly, concerns have been raised over whether such a process actually deepens democracy and transforms local governance or whether it just creates new local political patrons (Naraval, 2004).

Ultimately, governance reforms are political processes and, in a situation where the state is not autonomous from the particular interests of political players, knowledge-based innovations will be subjected to the wheeling and dealing of politics.

Vietnam: organisational development and information management knowledge to inform Project 30

The reform of public administration has been considered by the Government of Vietnam as a key element of economic development since the early 1990s. In 2001, the government adopted the Comprehensive Administrative Reform Master Program which is based on four pillars: institutional reforms, human
resource reforms, organisational reforms, and public finance reforms.

After two decades of implementing these reforms and the introduction of, for example, approaches such as one-stop-shops, administrative services have become more accessible, transparent and accountable (World Bank, 2009a). While these are positive steps, the Government aims to simplify administrative procedures still further and, in 2007, issued the Decision QD-30/TTg: Master Plan of Administrative Procedure Simplification in the Fields of State Management (known as ‘Project 30’).

Various types of knowledge/pieces of research-evidence have informed the government planning and implementation of this initiative. For example, a study conducted by the University of Copenhagen in 2008 found that profitable small and medium enterprises in Vietnam are more likely to pay bribes than other enterprises (Rand et al., 2008). The results from the Governance Module of the Vietnam Household Living Standard Survey conducted in 2008 by the Vietnam General Statistics Office, with support from the World Bank, showed that 65% of respondents believed corruption to be a problem for their family (World Bank, 2009a).

In addition, a report on doing business in Vietnam published in 2010 has shown that in order to start a business an entrepreneur requires 11 administrative steps, which take on average 50 days, compared to 8.1 steps and 41 days for other countries in East Asia and the Pacific (World Bank, 2009b). The same study found that enterprises have to pay taxes 32 times a year in Vietnam, which takes more than 1,000 working hours to complete. This is more than four times the average number of hours required in East Asia and the Pacific countries (26 official payments per year, and 227 working hours per year) and much more than the OECD countries (12 official payments per year and 194 working hours per year) (World Bank, 2009b).

The intricacy of the public administration structures exacerbates the complexity of the administrative procedures. There are 1,000 communes in Vietnam, nearly 700 districts, and 63 provinces, with more than 1,300 provincial departments offices. There are 24 ministries and ministerial level agencies with more than 300 departments under them. Each of these administrative units has the right to issue regulations and guidance for the implementation of different administrative transactions. This jungle of administrative procedures and regulations creates formidable barriers for both firms and citizens.

All of this information has contributed to the design of Project 30, which was officially launched in January 2007 across all four administrative levels (central, provincial, district and commune). Project 30 is managed by a team appointed directly by the Prime Minister in the form of a dedicated Task Force that is headed by the Chairman of the Office of the Government and includes representatives from ministries and provinces. The novelty is that all of the assigned staff work on Project 30 full time in order to ensure a higher degree of accountability for the project outcomes.

The overall objective is the simplification of administrative procedures. In order to achieve this, the project aims to create greater access to information by both businesses and citizens through a national database of administrative procedures. This is expected to save transaction costs and reduce opportunities for corruption. If Project 30 is successful, it could save up to 130.000 billion VND (approximately $6.8 billion) in 10 years by cutting the existing administrative procedures by an estimated 30%.

Upon completion of phase 1, the database created to collect all the existing administrative procedures included over 5,700 administrative procedures, 9,000 regulating documents, and more than 100,000 administrative inventory forms. The database went live on the internet in October 2009.

The latest updates from the Project 30 website show that at the end of March 2010 all 24 ministries and ministerial level agencies had completed phase 2 of the project with a review of their respective administrative procedures. As a result, the Ministry of Trade and Industry has suggested removing 74% of the documents and formalities that were considered unnecessary and which would save 88 billion VND (approximately $4.6 billion) (Hoa, 2010).

Indirect as well as direct channels exist that allow researchers and research institutions to feed in comments and research-based evidence to inform Project 30. The indirect channels are business associations, academic research institutions, and citizen groups represented on the Advisory Board for the Simplification of Administrative procedures. Of the 201 administrative procedures that are subjected to priority review, 133 have been changed as a result of recommendations from the Advisory Board.

The direct spaces and links that contribute to the knowledge that informs the project are the working groups established at the Central Institute of Economic Management to support the Advisory Board for the Simplification of Administrative Procedures. A second direct link is the opportunity created by the project website. The database of administrative procedures makes this interaction much easier and allows a direct link to citizens and businesses interested in these reforms.
The most innovative characteristics of Project 30 are that it is being implemented at all four administrative levels, that its objectives are measurable and, importantly for our discussion on types of knowledge, that it has been informed by research reports produced by the government in collaboration with international donors. In addition, Project 30 opens up real opportunities for the direct engagement of citizens and businesses who can contribute suggestions based on their first-hand experience and knowledge about administrative procedures.

Conclusions

The case studies presented in this Background Note show that different types of knowledge by different stakeholders can result in positive outcomes by establishing a more accountable, participatory and transparent local governance environment.

The case study of the OSS in Indonesia shows that knowledge generated to identify the source of problems and chart existing practices, in addition to more formal impact research funded by international donors, has contributed to the design of administrative policies that promote the expansion of small businesses and reduce opportunities for corruption.

The experience from the Philippines has showed that increased participation and citizens’ engagement in local development processes benefits from the tacit knowledge that already exists among citizens and communities. While this has led to positive results at the local level, it is uncertain how this intensive participatory process can be scaled up and made more sustainable.

Project 30 in Vietnam has shown that knowledge produced through activities to clarify, improve and develop ongoing practices and to audit and regulate procedures is leading to a significant streamlining of administrative procedures and the more direct engagement of citizens and businesses with public institutions and the process of administrative reforms.

Linking research-based evidence with policy-making is not simple, given the complexities of policy processes and reforms. In this Background Note we wanted to show how different types of knowledge can contribute to more evidence-based policy-making processes. In doing so we have developed a taxonomy of types of knowledge using the traditional hierarchical structure of the Linnaean approach.

At the top we find the main category ‘knowledge’. This is divided into knowledge produced by evidence-based policy research and academic research. Further down in the hierarchy we differentiate between knowledge produced by specific research methods, by the sources of knowledge and by the research purpose. The latter category was then split into seven distinct purposes to analyse and classify the knowledge types in the three case studies.

The system created by Linnaeus in the 18th century was not without its critics. A contemporary of Linnaeus, the French naturalist encyclopedic author Georges-Louis Leclerc, Comte de Buffon, argued that it did not fully capture the complexity of nature. De Buffon’s suggestion was to adopt a multiple classification approach (vs the standardisation approach used by Linnaeus) to allow the organisation of the same things (i.e. objects/information) in different categories.

While Comte de Buffon lost the intellectual battle two and a half centuries ago, his insights provide us with important lessons for the classification and management of knowledge. His multiple classification, or faceted classification, has finally found its raison d’être with the massive expansion of computing since the 1980s and is widely applied in information systems through, for example, tagging and different key words.

The taxonomy developed in this Background Note is an experiment that can be further developed by creating additional categories of types of knowledge. This could include specifying different sources of knowledge, such as organisational knowledge, practitioner knowledge, user knowledge, research knowledge, policy community knowledge, and applying these to the analysis of knowledge types.

A further classification could be based on the qualitative characteristics of the types of knowledge such as: transparency (is it open to scrutiny?), accuracy (is it well grounded?), purposiveness (is it fit for purpose?), utility (is it fit for use?), propriety (is it legal and ethical?), accessibility (is it intelligible?), and specificity (does it meet source-specific standards?) (Pawson et al., 2003).

The taxonomy created by Linnaeus highlighted the importance of simplicity and standardisation and has helped to create a common language that has greatly enhanced coordination and collaboration among botanists and biologists (Lambe, 2007). The greatest legacy of Compte de Buffon relates to the many possible ways in which it is possible to organise the same information.

Similarly, we believe the classification of knowledge types can help knowledge producers (in a broad sense) and knowledge users to see different types of knowledge as legitimate sources of information for policy decisions that are knowledge-based, deliberative and tested by real arguments (Ashley, 2011). In this Background Note we have suggested one possible approach.

References


