Note on Sub-Themes under ICF Round on PFM & Fiscal Space

	Sub-themes for 1st Round of ICF on PFM & Fiscal Space
1	Innovative techniques to enhance collection of taxes (such as use of GIS, Google Maps and Google car in ET&NC Department to increase coverage of property tax)
2	Developing an end to end e-procurement solution
3	Automation of tax payments and license fees of LGs and other areas (local government taxes, fees, Abiyana – water charge, etc.)
4	Analytics system that can use PIFRA data to generate effective budget reports
5	Integration of different data bases of taxpayers for holistic management of enforcement (for example data integration of businesses registered with PESSI, Labour Department, PRA, E&T etc.)
6	Look at a system of automating the information from PC-Is for estimating implications for future current budget.
7	Innovative ideas for disaster risk financing, planning and disbursement

1. Use of Technology to Enhance Tax Collection

Problem statement: Excise & taxation has not been able to fully capture potential tax sources in the province; what innovative ways can help address this problem?

Description: Provincial capacity to generate fiscal revenue has been low in Pakistan since at least the early 2000s[1]. In 2019, Punjab missed its tax collection target by over 63%[2]. This revenue shortfall may be partly due to the poor state of the Pakistan economy, but also due to the fact that much economic activity occurs in the informal / undocumented sector. However, the State Bank notes that weak tax compliance and a large number of tax exemptions play a large role in low revenue generation, nation-wide[3]. Given the high national debt, this low revenue mobilization has serious implications for long term fiscal sustainability and can severely hinder the state's capacity to invest in public goods and services such as healthcare and education.[4]

One area of concern is property tax. Though rapid urbanization has caused a substantial increase in taxable property, growth in the number of taxable units has been slow despite recent efforts under various reforms. Property tax yields only 6% of Punjab's tax revenue. Urban property tax is considered to be the most growth-friendly levy across countries[5]. The Excise & Taxation department is keen to deploy technology that can help identify, document and bring into the tax net, the untaxed property.

Potential solutions could be:
   a. Technology for integrating google maps with existing tagged data
   b. Use of google car to capture property information for taxation and other positive innovations that can be piloted to enhance the collection of taxes.

2. E-Procurement

[1] https://www.jstor.org/stable/41428675?seq=1
[2] https://tribune.com.pk/story/2056050/1-punjab-misses-tax-collection-goal
[3] http://www.sbp.org.pk/AnnualRepo/index-4.2.asp
[4] https://qz.com/africa/1573957/developing-countries-will-benefit-from-better-tax-collection/
https://www.weforum.org/agenda/2015/02/why-are-tax-revenues-so-low-in-south-asia/
[5] https://www.theigc.org/blog/reforming-the-urban-property-tax-in-punjab

Problem statement: The government's procurement runs into billions but is still non-standard and manual, resulting in pilferages, lack of transparency and inconsistent/non-uniform pricing of common items. What kind of e-procurement innovations can provide an end to end solution?

Description: Government procurement can broadly be categorized as routine procurement of standard articles (such as stationery, printing, furniture, fittings etc.), and non-standard procurement of goods and services.

At present the procurement system is manual and suffers from leakages. Global trend in achieving procurement effectiveness is towards adoption of e-procurement. As a result of the introduction of e-procurement, different countries have reported substantial savings in the order of 5-30% of public expenditure in public procurement. In 2013/14 PPRAs with assistance of the World Bank conducted an e-Procurement Readiness Assessment study, followed up by developing e-Procurement Strategies. Based on these assessments, Pakistan is considered generally ready for e-Procurement in both the public and private sector. The private sector is also very keen to benefits from e-procurement.[6]

Potential solutions could be:
   a. International evidence suggests that automation of procurement at a minimum results in 10% efficiency savings. This innovation stream will look at developing technology and governance solutions to automate public procurement.
   b. This may include the use of machine learning techniques to improve procurement solutions and through the use of similar other technologies.

3. Payment automation

Problem statement: Payment of taxes, charges and license fees, is still problematic and not without a hassle; how can e-payments resolve this issue?

Description: An average Pakistani citizen's interaction with the state bureaucracy is fraught with a multitude of challenges. For one, lack of information and complex procedures often lead to individuals having to repeatedly visit multiple offices to access service or resolve their issues. This is particularly aggravated in situations where financial transactions are required e.g. in the payment of taxes, fines and fees. The lack of transparency and accountability within such operations can leave citizens vulnerable to corruption, placing an additional burden upon them and increasing inefficiencies in service delivery.

Research in other developing countries has demonstrated that e-payment systems have the capacity to increase the transparency, accountability and efficiency of state mechanisms and services.[7] The Punjab government has already begun to take steps in this direction. For instance, an ePay facility was launched in October 2019 for the online payment of taxes, through which Rs 500 million was collected in the first 100 days after launch. However, access to such mechanisms is limited for average citizen (for instance due to a low level of credit card penetration[8]), and there are still a number of payments that must be made manually.

Proposed interventions will look at technology-led governance innovations to develop a more holistic and safe transaction system of paying taxes and other levies that facilitate citizens and contribute toward increasing revenue for the province.

Potential solutions could be:

   a. Adding more services to the ePay system to replace manual payments like 'Abiyana' – the water charge.
   b. Developing new systems to automate payments, also leading to increased transparency.
   c. Conducting data analysis on payment data, to refine policy and planning.

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[6] https://ppra.punjab.gov.pk/system/files/E-Procement%20Strategy.pdf
[7] http://www.iosrjournals.org/iosr-jbm/papers/Vol17-issue3/Version-1/F017315161.pdf
https://pdfs.semanticscholar.org/2d08/fb2321c4f0aed32256ed17cad564efe6d4c7.pdf
[8] https://www.thenews.com.pk/print/473525-payment-problems

4. **Analytics on Financial Data**

Problem statement: There is a need to apply business intelligence techniques to Punjab government's financial data to improve policies and take corrective action.

Description: SAP software products provide powerful instruments for helping companies to manage their financials, logistics, human resources, and other business areas. The Punjab government uses the SAP system to record all its spending and financial data. For the financial year 2019-2020 the allocated budget of Punjab government was estimated to be Rs 2.3 trillion[9]. However, this data is not subjected to any analysis, or used for policy making. With a complete and interactive view of programmes, budgets, and high-level trends across the entire organization, public sector finance leaders and analysts will be able to identify key trends and outliers, drill into specific data points, and mitigate the risks associated with fraud, waste, and abuse.

The interventions in this area will focus on designing innovative systems to conduct financial analytics and use those insights to drive better policy decisions.
Possible solutions can be:

    a. The innovations can look at designing easy to use analytics systems that can help departments generate customizable financial reports, budget execution status and data presentation through graphs, which is much easier to read and comprehend.
    b. Develop a better understanding of how and where the financial resources are being used what would aid in improving efficiency, bring more transparency and effective fraud detection.

5. **Data Integration to Identify Potential Tax Payers**

Problem statement: Large amounts of data sets are collected by various government entities that when integrated, can help in increasing the tax base, however, these data sets have no integration with each other.

Description: Private sector entities register and apply for various licenses with the provincial governments. The departments maintain an independent record of these registrations and the details of the private sector. However, this data is not integrated with the data maintained by tax authorities, - a fact which could lead to significant enhancement in the tax base.

In October 2019, the FBR asked motor vehicle registration authorities and car manufacturers to provide information for both the compliant taxpayers and everybody else not on the Active Taxpayers List (ATL). The FBR is acquiring this information for broadening the tax base. The tax authorities believed that a number of individuals were purchasing cars or registering motor vehicles, who were not on the tax roll but their status suggested otherwise, and were therefore likely concealing their true income.[10]

The interventions in this aspect will focus on designing innovative strategies to integrate various datasets in government institutions which would lead to identification of potential taxpayers and help in informed decision making.

Potential solutions can be
    a. For example, the Labour Department registers a large number of private sector entities, PESSI, Directorate of Industries and similarly other departments.
    b. How can the data be integrated to develop a master tax payers list and identify potential tax payers, who are not paying their taxes.

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[9] https://www.dawn.com/news/1488192
[10] https://pkrevenue.com/taxation/fbr-acquires-information-of-motor-vehicle-purchasers/

6. **Innovative ideas for disaster risk financing, planning and disbursement**

Description: The outbreak of COVID-19 globally and in Pakistan has brought governments and international leadership to face certain deadlocks on matters of policy and designing and implementing response. The governments of Punjab and Khyber Pakhtunkhwa are no exception and face some critical challenges in designing and implementing relief packages that are well targeted and effective. Underlying issues include limited processes of disaster risk planning and finance and developing credible disbursement systems. The SNG-II Innovation Challenge Fund is seeking that can help pilot innovative ways by integrating human identity data and technology to develop systems that can help towards planning, financing and accurate disbursement of funds and support packages to support people in distress. The ideas may include integration of technology systems, traceability, tracking and disbursement mechanisms as well as swift registration systems of those individuals who have been affected. The ideas may be inspired by the COVID-19, however, should be adaptable to other such natural risks such as floods and earthquakes, etc.