PROGRAM-FOR-RESULTS INFORMATION DOCUMENT (PID)
CONCEPT STAGE

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Program Name	*Tanzania Secondary Education Quality Improvement Project*
Region	*Africa*
Country	*Tanzania*
Sector	*Education*
Financing Instrument	*Program-for-Results*
Program ID	*P163439*
{If Add. Fin.} **Parent Program ID**	*Not Available*
Borrower(s)	*Ministry of Finance and Planning*
Implementing Agency	*Ministry of Education, Science, and Technology*
Date PID Prepared	*September 7, 2017*
Estimated Date of Appraisal Completion	*February 2018*
Estimated Date of Board Approval	*22 March 2018*
Concept Review Decision	Following the review of the concept, the decision was taken to proceed with the preparation of the operation.

I. Introduction and Context

A. Country Context

1. **Tanzania has registered impressive rates of economic growth and poverty reduction over the last decade.** GDP grew annually at an average of 6.5 percent—higher than the Sub-Saharan African average and of many of Tanzania's regional competitors. Poverty has declined from 34 to 28 percent between 2007 and 2011/12 and income inequality has also declined.

2. **Despite its strong growth performance, the ability of the economy to generate new jobs has been impeded by low productivity growth.** While healthy economic growth has been accompanied by signs of a *structural transformation,* productivity remains low. Overall increases in productivity have relied on structural changes in the economy, as labor shifted from low-productivity agriculture to higher-productivity services. However, there has been limited productivity growth within sectors. Around 80 percent (2.6 million) of the new jobs created between 2006 and 2014 were in the informal sector, in particular, informal activities in the wholesale and retail services. Moreover, labor productivity is low compared to other SSA countries.

3. **Despite rapid progress and high economic returns, the average skill levels of the labor force remain low.** Over the last two decades, the average years of education of the adult population has increased from 4 years in 1995 to 6 years in 2015. Over a similar period, the economic returns to education have also remained relatively stable. For example, the rate of return to a year of secondary education increased from 13 percent to 15 percent between 2000 and 2011. While education attainment among new labor force entrants has increased, only around 10 percent of the working population have any post-primary education necessary to support the required economic diversification.

4. **The lack of science graduates is also a major constraint to building the capabilities in science and technology required to transform the economy.** Tanzania's current development plan highlights the importance of investing in science, technology and innovation to support the shift of the economy from low productivity sectors such as agriculture to more productive sectors including manufacturing and services. However, the higher education system is currently unable to provide sufficient science graduates to meet demand and provide the skills necessary for technology adaptation and development. In 2013, only a quarter of university graduates were from science streams. This very low enrolment (Gross Enrollment Ratio of only 4 percent in 2014) has its roots in low levels of completion and poor learning outcomes in secondary education.

5. **Unless addressed, these skill shortages will hamper Tanzania's ability to achieve the transformations necessary to achieve middle income status.** Approximately 40 percent of firms interviewed as part of the 2013 Tanzania Enterprise Survey identified an inadequately educated workforce as a major constraint to their operations – much higher than the average rate of 23 percent across Sub Saharan Africa. Providing greater access to good quality post-primary education opportunities can contribute to better overall levels of human capital and support the transformations necessary to accelerate rates of equitable economic growth.

B. Sectoral and Institutional Context of the Program

6. **There have been significant improvements in secondary education outcomes over the last 10 years.** Enrolments in lower and upper secondary have increased substantially from 675 thousand in 2006 to 1.8 million in 2016. And despite significant growth in the overall school-age population, enrolment rates in lower and upper secondary have risen from 12 to 31 percent over the same period. Inequalities in education access have also narrowed. For example, gender gaps in lower secondary access, favoring boys, were eliminated in 2014. Overall, the number of graduates entering the labor force with either lower or upper secondary education has increased by 150 thousand to 420 thousand over the last 10 years adding to the existing stock of skilled workers and contributing to better economic and social development outcomes. Despite this rapid progress, the secondary education sector suffers from low and unequal levels of (i) access and completion; and (ii) student learning outcomes.

Continued low and unequal levels of access and completion.

7. **Despite recent improvements in enrolment, access to secondary education in Tanzania is still low compared to other comparator countries.** Differences are widest at upper secondary - in 2014, the Gross Enrolment Rate was seven percent compared to a low-income country average of 32 percent. While girls' and boys' enrolment rates in lower secondary are similar, male enrolment rates in upper secondary are almost double those for girls. Socioeconomic disparities in secondary are also large. For example, lower secondary net attendance ratios were 6 percent for the poorest fifth of households compared to 41 percent for the wealthiest households. These are partly driven by regional disparities; net attendance ratios for households in Mjini Magharibi were 56 percent compared to 11 percent in Rukwa.

8. **Secondary enrolment in science and mathematics lags far behind other subjects.** In lower secondary, only 33 and 44 percent of students sat for physics and chemistry 'O' levels. This limits the number of children taking science and mathematics subjects in upper secondary. In 2015, the secondary education system produced less than 18,000 successful mathematics and science graduates equivalent to about 2% of the relevant age cohort.

9. **Only around two-thirds of students in the last grade of primary successfully pass the leaving exam and enroll in lower secondary.** Once in secondary school, student drop-out is relatively high in all grades but peaks after examinations at the end of Form II and during transition from lower to upper secondary. Drop-out rates tend to be lower for girls in lower secondary. However, fewer girls than boys that reach the end of lower secondary (Form IV) continue to upper secondary because of their poorer Form IV examination results. Among the 145 countries that reported data in 2012, Tanzania had the twelfth worst gender parity index for enrolment at upper secondary and compared unfavorably with low-income country and Sub-Saharan Africa averages. Combined with relatively low levels of access, the proportion of youth that complete lower and upper secondary education is low and has consequences for enrolment in post-basic education and training as well as for average levels of skills in the labor force.

Low, unequal and declining student learning outcomes

10. **In 2015, less than a quarter of students passed the Form IV mathematics examination and in most other subjects, pass rates hovered around 50 percent.** Except for Kiswahili, boys outperform girls in all subjects and the differences are large. For example, only a third of girls passed the Form 4 physics examination compared to a half of the boys. There are also significant disparities in examination results between regions; in 2016 overall Form 4 pass rates varied from 53 percent in Lindi to 88 percent in Iringa and Njombe. The passing grade in Form IV has been a key determinant of access to upper secondary with students achieving a Division III pass or higher generally gaining admission to upper secondary. Pass rates at these higher divisions have been tightly controlled to match with the number of available upper secondary spaces so they are not a good measure of trends in learning. However, pass rates at the lower Division IV level have also declined as overall levels of secondary enrolment have increased and this suggests that greater access has had a negative impact on quality.

11. **The government's announcement in 2016 of the Free Basic Education Policy (FBEP) has also lifted an important barrier to secondary school access and completion.** The policy aims to universalize 11 years of basic education and eliminate both informal fees for primary education and formal fees for lower secondary education. Indications are that the policy has led to a larger than expected surge in student enrolment in pre-primary and primary schools, with the number of pupils entering primary Standard 1 increasing by 41 percent in 2016.

12. **However, it also adds significant pressure on the secondary school system and improving education quality in this context is ambitious.** Assuming continued higher enrolment in Standard 1 and reduced dropout, it is likely that the abolition of fees will swell the primary and lower secondary school population considerably over the next few years, exacerbating pressure on facilities, teaching and learning materials, and teacher staffing. Estimates suggest that enrolment in secondary schools will increase by 41 percent between 2015 and 2021 from 1.8 to 2.5 million. While the experience in Sub-Saharan Africa of abolishing primary school fees shows that countries, including Tanzania, can expand school enrolment at this pace, over the last five years relatively few countries have managed this in secondary. Improving quality at the same time will also prove a significant challenge.

Addressing these challenges will require actions to improve the skills and motivation of teachers and providing adequate and good quality secondary school learning environments.

Teacher skills and motivation

13. **Building a competent and effective teaching force is critical if secondary education outcomes**

are to improve. However, available evidence suggests that despite recent increases, secondary schools still suffer from teacher shortages particularly in mathematics and science. For example, 7,815 or 62 percent of mathematics teacher posts in lower and upper secondary are vacant, with corresponding figures for biology, chemistry and physics of 50 percent, 56 percent and 72 percent, respectively. There is also considerable variation in vacancy rates across regions. For example, in Singida and Lindi vacancy rates for mathematics teachers are above 80 percent. Underlying these high vacancy rates are the limited numbers of students that successfully complete secondary and enroll in university as well as increased competition to employ eligible graduates from other sectors of the economy. These issues are particularly severe with respect to mathematics and science teachers.

14. **Recent evidence also suggests that the skills and motivation of secondary school teachers are low.** Even when teachers are in post, absenteeism and administrative duties limit the amount of time teachers spend in the classroom. A recent study in five regions found a fifth of government secondary school teachers absent during unannounced visits. Moreover, only 30 percent of the teachers that were present were in class teaching. The relatively poor secondary school examination results also suggest that the competencies of existing teachers are low. The gender and socioeconomic composition of students will change as secondary education is expanded. This will present new demands on secondary teachers including managing classes with a wider range of abilities and greater needs in terms of supporting at risk learners including girls.

15. **While there has been progress in strengthening systems to manage and support teachers, they remain weak.** In-service training is irregular and often addresses only some of the weaknesses in competencies exhibited by secondary school teachers. Moreover, training usually takes place outside of the school with limited follow up or support to help teachers apply the skills they have learnt. New teachers receive limited classroom practice during their pre-service education are placed in schools without an induction period or formally assigned mentors. Quality assurance in schools has improved but systems to introduce stronger incentives for teachers to attend school and focus on student learning outcomes are in place but are currently not operational. For example, the civil service performance review and appraisal system has been introduced but implementation is patchy. Moreover, links between performance, career development and remuneration are presently limited.

Learning environments

16. **The poor quality of the learning environment in many secondary schools also affects teacher motivation as well as student outcomes.** Many schools do not meet norms for teaching and learning materials. While there have been improvements in student textbook ratios recently, shortages in specific subjects remain. Moreover, reviews of textbook policy over the last 10 years also point to the low quality and lack of relevance of existing textbooks and the need to align them with the curriculum goals of the Education and Training Policy issued in 2014.

17. **Some areas of school infrastructure are currently inadequate and the continued secondary expansion will add further pressure.** Existing secondary schools have shortfalls in classrooms and other facilities. For example, the availability of water and sanitation facilities also tend to vary widely across secondary schools and the number of latrines is inadequate. This is an important driver of poor education outcomes for girls entering puberty during secondary school. Facilities for science teaching are also inadequate with many schools operating without functioning laboratories to teach practical aspects of the curriculum. A lack of ICT equipment for teachers also limits their ability to exploit online teaching resources and materials to help them manage with large class sizes and high teaching loads.

Expanding access and reaching underserved areas will also require more secondary schools. Since distance between schools and households is a major factor in explaining school drop-out it will be important to locate new schools optimally to reduce travel times.

18. **The limited engagement of parents and the local community in school affairs can also affect the school learning environment.** School boards are established in most secondary schools but their membership and focus on disciplinary issues tends to limit engagement with parents and their support for issues facing the school. In Tanzania, stronger ties between schools and parents have been shown to improve outcomes particularly for girls. For example, a recent initiative that strengthened engagement between parents and local secondary schools improved learning outcomes for marginalized children including girls.

C. Relationship to CPF

19. **The proposed operation will support all three pillars of the Country Partnership Framework (CPF) 2018-2022 expected to be approved in 2017:** (i) diversify growth and enhanced productivity; (ii) boost human capital and social inclusion; and (iii) make institutions efficient and accountable. The PforR will contribute to improving access to and learning outcomes in secondary education, which will boost human capital and inclusion. It will also serve as basis for further skills development and on-the-job training as critical elements for enhanced productivity. Furthermore, the program's support to the quality assurance and monitoring and evaluation systems will contribute to greater transparency of roles and responsibilities and make institutions more efficient and accountable.

D. Rationale for Bank Engagement and Choice of Financing Instrument

20. **The World Bank has been successfully supporting the basic education sector in Tanzania for 30 years.** It has been supporting quality improvements in primary and lower secondary education through the ongoing Education Program for Results (EPforR). In addition, the World Bank had a stand-alone secondary education project that closed in December 2016. The project improved the quality of secondary education and was successful at improving completion rates and improving quality standards of secondary schools.

21. **The proposed operation aims to build on the achievements of past and ongoing programs at a time of rapid secondary school expansion.** It will continue to support the government's effort to maintain the quality of teaching and learning at a time of rapid expansion brought about by the Free Basic Education Policy (FBEP). It will complement the existing EPforR operation by extending its key elements into upper secondary schooling. It will also use the teacher deployment and school construction strategies currently in development as part of the EPforR to guide and identify appropriate results and DLIs in these areas.

E. Rationale for PforR with IPF as financing instrument

22. **The EPforR has shown that a results-based financing approach can be successful in the education sector in Tanzania.** In particular, results-based financing has been successful because it has promoted alignment between local governments and the MoEST. The approach has achieved results at the national level as well as at the local government level.

23. **The proposed program is also expected to provide a strong link and complement to the**

Education and Skills for Productive Jobs (ESPJ) Program for Results. The ESPJ and the proposed program both cover education and training opportunities for post-primary students. However, the proposed program focuses exclusively on general lower and upper secondary education while the ESPJ PforR aims at strengthening the institutional capacity of technical and vocational education. The combination of programs provides an appropriate mix of opportunities for children after they complete primary and lower secondary schooling.

24. **The scope of the proposed operation will also include a technical assistance IPF component**. This component is designed to carefully identify critical trade-offs, needs assessments, cost-effectiveness and sustainability of proposed approaches in responding to the challenges emerging in the secondary education sector. TA support provided by DFID for EPforR created an implementation feedback loop encouraging adaptive learning and timely course correction that has proved critical in keeping implementation on track. The free basic education policy and the expected increase in lower and upper secondary enrolments creates TA needs beyond current EPforR activities, which will be supported through the proposed operation. The purpose of the Technical Assistance and Capacity Building Component of the proposed PforR operation is to provide implementation support and build the capacity of MoEST, PO-RALG and NECTA to manage the expansion of the sector. Proposed activities will include:

- Analytical work to develop an evidence-based approach to inform trade-offs involved in sector expansion and support the development of more cost-effective approaches to secondary education service delivery
- Further develop the EMIS system to improve information for education planning in secondary schooling with a focus on improving information on teachers (e.g. subjects taught, trainings needed and received)
- Further development of national framework for continuous professional development and its operational plan
- Support the development of a Form IV national assessment
- Pilot gender informed and gender focused interventions
- Support to build sustainable capacity in the sector for effective policymaking, planning, implementation and monitoring and evaluation

The implementation arrangements for the TA component will be elaborated during preparation.

II. Program Development Objective(s)

25. Program Development Objective: To enhance equitable access to and improve teaching and learning environments in government secondary schools with a focus on mathematics and sciences.

Key Program Results

26. The Program is expected to deliver the following results after five years:

Results area 1: **Teachers with the skills and motivation to teach all children.**

- *Skills*. Improve the quality of teaching through regular training that provides skills to identify and support at-risk learners, greater system support to teachers through improved school leadership, use of ICT and online resources for science and mathematics and improved assessment
- *Motivation*. Stronger financial and non-financial incentives for teachers, greater accountability

between schools and local communities, stronger school leadership

Results area 2: **Adequate learning environments to support teaching and learning.**

- Sufficient mathematics and science teachers in secondary schools
- Expanded access and reduced class sizes in science and mathematics
- Provision of adequate and good quality teaching and learning materials
- Improved access to practical science through laboratory provision and innovative approaches to science teaching through ICT (e.g. virtual laboratories)

27. **Gender differences in secondary school performance will be addressed directly in both results areas.** In the first results area, a central component of the envisaged in-service teacher training will be to equip teachers with the skills to support at-risk learners and particularly girls. The results area also focuses on providing incentives for teachers to focus on girls' performance. In the second results area, specific improvements in facilities are expected to have larger impacts on girls' performance. For example, improved water and sanitation facilities in schools are especially important for the well-being of adolescent girls making the transition to puberty and can support better school attendance and performance. Activities under the proposed program to strengthen school-community engagement are also expected to contribute by tackling some of the external factors (e.g. demands on girls' time in the household) that hamper girls' education outcomes.

III. Program Description

A. PforR Program Boundary

Government program

28. **The major objectives for secondary education are outlined in the Education Sector Development Program (ESDP, 2016/17-2020/21) and are aligned with Tanzania's overall Education and Training Policy (ETP, 2014)**. The main ESDP goals relevant for secondary education include:

- *Universalize basic education*. It is expected that by 2020, 98 percent of children reaching the end of primary will continue into lower secondary compared to 66 percent in 2015.
- *Increase transition to upper secondary.* It is expected that a greater proportion of lower secondary completers will continue their education and training through increase in the numbers going into upper secondary general education as well as into technical and vocational education.
- *Improved student learning outcomes.* The ESDP targets an improvement in Form IV ('O' level) and Form VI ('A' level) examination pass rates.

29. **The proposed program will support the overall lower and upper secondary education components of the ESDP for a five-year period to June 2023**. It will only support aspects of the government's program that are not already covered by the ongoing Education Program for Results program. The estimated cost of the government's overall secondary education program over the next five years (2016/17-2020/21) is approximately US$ 3 billion and elements that will be supported under the proposed program are approximately US$ 1.03 billion (Figure 3). The proposed program will encompass some but not all of the ESDP activities in the results areas highlighted. It is also proposed that the program will not support curriculum reform, teacher pre-service education, special needs and cash transfer programs.

30. **The scope of the proposed operation will also include a technical assistance IPF component**. This component is designed to carefully identify critical trade-offs, needs assessments, cost-effectiveness and sustainability of proposed approaches in responding to the challenges emerging in the secondary education sector. TA support provided by DFID for EPforR created an implementation feedback loop encouraging adaptive learning and timely course correction that has proved critical in keeping implementation on track. The free basic education policy and the expected increase in lower and upper secondary enrolments creates TA needs beyond current EPforR activities, which will be supported through the proposed operation. The purpose of the Technical Assistance and Capacity Building Component of the proposed PforR operation is to provide implementation support and build the capacity of MoEST, PO-RALG and NECTA to manage the expansion of the sector. Proposed activities will include:

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IV. Initial Environmental and Social Screening

25. **The recent environment and social systems assessment undertaken for the EPforR additional financing in April 2017 concluded that in general, the national regulatory framework for environmental and social management in Tanzania is consistent with the Bank PforR Policy and Directive in terms of principles and key elements.** The legal framework provides a reasonable basis for addressing environment, health, safety and social issues likely to arise from the TA activities. Technical guidelines and national plans/programs exist for environmental and social due diligence with respect to education. Moreover, Environmental and Social Management Frameworks under previous World Bank funded education projects have been deemed satisfactory in their implementation.

V. Tentative financing

{Same as in AUS}

Source: International Development Association (IDA)		($300m.)
Borrower/Recipient:		
IBRD		
IDA		
Others (specify)		
	Total	$300m.

VI. Contact point

World Bank

Contact: Samer Al-Samarrai
Title: Senior Economist
Tel: +1 202 473 8699
Email: salsamarrai@worldbank.org

Contact: Cornelia Jesse
Title: Senior Education Specialist
Tel: +1 202 473 8699
Email: cjesse@worldbank.org

Borrower/Client/Recipient

Ministry of Finance and Planning

Implementing Agencies

Responsible Agency: Ministry of Education, Science, and Technology

Contact: Dr. Leonard Akwilapo
Title: Permanent Secretary
Tel: +255 715 307 462
Email: akwilapo@gmail.com

Responsible Agency: President's Office – Regional Administration and Local Government (PO-RALG)

Contact: Eng. Mussa Iyombe
Title: Permanent Secretary
Tel: +255 26 232 2848
Email: mussa.iyombe@tamisemi.go.tz

VII. For more information contact:

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Web: http://www.worldbank.org/infoshop