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***Educational Policies, its Tensions, Agendas and Developments: What
Can We Learn from the International Experience?***

***Provision of Functional Model of National Skills System: Case of
Iran***

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1. Abstract

In recent decades, governments have changed their growth and development models in order to maintain and strengthen their global economic status; they all follow a unit objective which is highly skilled and professional workforce to attain economic growth. Therefore, skills development receives a great attention in development discourses in recent years. In Iran, like other parts of the world, some problems such as job deficiencies, skills shortages, local needs ignorance, improper regional development programs, and skills mismatch highlighted the importance of skills development more than ever. Governance of this area is highly complex due to the inter-sectorial nature of skills development and plurality of the actors. Thus an appropriate functional model is required to help government in decision making processes. This article tries to present an inclusive functional framework for Iran's skills sector by reviewing the functional components in governance area: policy-making, regulation, facilitation, and service provision. After presentation the institutional mapping of Iran's skills system and diagnosing through reviewing the related acts, regulations, and laws and fact-finding interviews, some parameters to empower the system are discussed.

Keyword: skills system governance, governance framework, national skills system, governance functions, institutional mapping

2. Introduction

National skills development policies and systems strive to meet present and future labour market needs for skills and to improve productivity and competitiveness in the sectors which are critical for the achievement of national employment and development goals. Skills policies and systems encompass technical and vocational training, workplace learning,

informal learning, learning opportunities in the informal and rural economies and education and training for lifelong learning.

Skill governance is seen as a dynamic system whose aim is to plan and control—to different degrees and levels—the national providing of education and training in order to meet the labor market skills demand. Governance of skills system provides real and virtual round tables at which employers, employees and the education system negotiate about their stakes and share their vision. The role of skills system governance is important so much so that many countries explored its different dimensions—regulation, policy process, financing methods, etcetera—in case of any lack of desired outcomes.

The functional settings of VET multi-level governance system examination puts emphasis on the importance of setting up effective coordination mechanisms at vertical and horizontal levels, and continuous refinement and reinforcement of all actors and mechanisms of the VET governance system at each level (regional, local, national, etcetera) as an essential parameter for VET system good governance (Foundation 2013). As far as education system is an important element in skills system governance, some analytical tools and frameworks are designed to enable systematic documentation and assessment of the policy and institutional factors that influence the performance of education and training systems—how well the system is equipping individuals to meet the demand for skills in the labor market (Tan et al. 2013). Strategy (the alignment between workforce development and a country's national goals for economic and social development), system oversight (the governance arrangements that shape the behaviors key stakeholders involved, including individuals, employers, and training providers), and service delivery (arrangements for managing the provision of services in order to achieve results on the ground) are some of the assessing areas (Hordern 2013, Tan et al. 2013). The analysis arising from the Hays index (Hays 2013) suggests that there is need for flexibility not only in education systems (i.e., whether the education system

can adapt to meet the changing needs of employers) but also in labor market policies that allow employers to determine wages, adopt measures for short-term employment, and draw talent through immigration.

Assessment the favorable governance structures and financing arrangements that would support the expansion of apprenticeship puts emphasize on the comprehensive legal framework—rather than a fragmented one—and shared financing responsibility among the different actors are known as strategies for developing apprenticeship (Barabasch 2014). Moreover, examination the role of VET governance to build an entrepreneurial continuum—that includes entrepreneurial policies, entrepreneurial institutions, entrepreneurial communities and entrepreneurial individuals—recognizes the governments as the motivators of local partnerships and creators of platforms for communication(Carlebach, Prina, and Vuorinen 2016). An integrated approach to skills governance among stakeholders ensure a virtuous feedback loop between labour market and education and training actors—which is an important aspect to achieve a balance between skills and job needs (Carnevale and Smith 2012). Examination of institutional arrangements and governance issues on the implementation of National Qualifications Frameworks (NQFs) also shows that NQFs seem to be in tension with existing forms of governance. Implementation is described as having been ‘hindered’ by differences between different government departments or agencies, lack of power of qualifications authorities, overlapping responsibilities, conflicts between different laws and regulations, and changes in government (Allais 2010). The importance of forecasting and intelligence infrastructure for a mature skills-system-governance is not deniable. Incentive measures to steer education and training provision—that may be directed at employers, education and training providers, or the learners themselves—also are known as means to increase the training offer (in certain subjects) and/or ensure its quality,

encourage learners to take up training (in specific subjects) and to encourage flexibility/mobility (Mkandawire 2002).

Aside from the national and regional approaches, some global skills strategies are prepared to facilitate a cross government approach and peer-learning on effective skills policies, and to address the global dimensions of the supply and demand for skills. These strategies mainly seek to help countries to improve: (1) responsiveness; (2) quality and efficiency in learning provision; (3) flexibility in provision; (4) transferability of skills; (5) ease of access; and (6) low costs of re-entry (Co-operation and Development 2011). However, assessment of the current governance of national skills system is the first step toward any reformation.

In Iran also, due to the importance of integrity in strategy setting of skills system, some researches are devoted to examine the good-governance factors in different approaches. In some of these researches, a systematic approach is employed to diagnose Iran's skills system in structural, behavioral, and environmental viewpoints (Salehi Omran 2014). Some strategies were also introduced to enhance the effectiveness of Iran's skills system; such as: formulating the comprehensive strategies of national skills development, increasing the share of skills training to 50 percent in the 6th National Development Plan, and converging the skills policies by founding "National Skills Council" (Navid Adham 2016). Diagnosis of national skills system in Iran highlights the importance of an integrated policy-making system to reduce parallel sporadic activities (Attarnia 2014).

3. Model & Methodology

Different functions of skills system can be divided into 2 main groups: 1-supporting functions, which refer to the system governance, and 2- main functions, which refer to the real job of the system—what does the skills system do?

Governance means "the processes of interaction and decision-making among the actors involved in a collective problem that lead to the creation, reinforcement, or reproduction of social norms and institutions" (Hufty 2011). According to this definition, authors divided the role of governance system into 4 separate areas: decision-making or policy-making, regulatory, facilitation and goods/service provision. Moreover, according to OECD (Co-operation and Development 2011) the main functions of skills system are classified in 3 areas: 1-developing skills, 2-activating skills, 3- using skills effectively. The supporting and main functions of skills system are shown in figure 1. This functional model provides a framework to recognize and categorize the actors involved in and the challenges of the whole skills system.

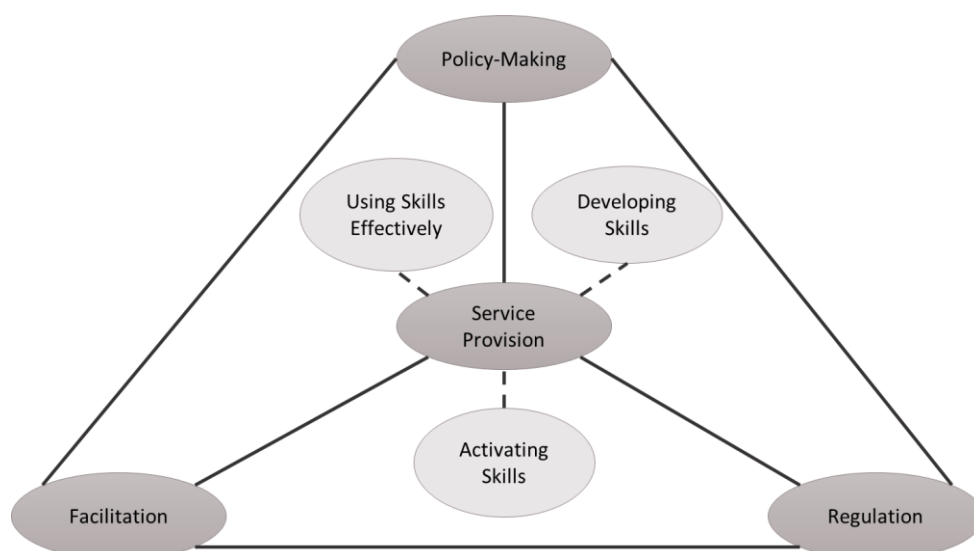


Figure 1: Supporting and main functions of the national skills system: policy-making, regulation, facilitation and service provision in support of using skills effectively, developing skills and activating skills

The diagnostic part of this paper presents the main outcomes of the project “Formulating the National Strategic Plan of Skills System”, a project done by the authors in collaboration with “Supreme Council for Cultural Revolution”, which ran from February 2015 to September 2015. The outcomes were updated once more for this presentation.

The challenges were identified through: 1) examining the national data, documents and researches (table 2); 2) fact-finding sessions. The report has also benefited from ongoing dialogue and consultation with a wide range of Iranian experts.

4. Supporting Functions:

1-1 Policy Making

Although policy-making definition raised many debates (Dror 1983, Howlett, Ramesh, and Perl 1995, Lindblom and Woodhouse 1993) there is agreement that it is the main managerial function in every system. Policy-making defines who does what in order to gain which objective. Different sub-function of policy-making could be introduced as: research, analysis, planning, demonstration, and evaluation (Abert 1974). By adjusting these sub-functions into skills system, the followings were gained as the sub-function of policy-making role: Policy research and resources assessment; Identification of national priorities; Planning; Demonstration; Evaluation & Accountability.

- ***Policy Research & Resources Assessment***

In order to identify the needs of individuals, groups and societies, to set priorities, and to define the gap between the current and desired situation, policy-makers in all levels of skills system have to do some research either by themselves or by other actors which are dedicated to do so. Another aspect of this sub-function is to provide essential data and

information for all actors of skills system, that are required in order to fulfill the goals of the main system.

- ***Identification of National Priorities***

Since the strategic planning of skills system is based on the national preferences, it is important for the priorities to be identified precisely. Scarce resources should be allocated to the objectives with high priorities.

Priority identification is done based on the policy research and resource assessment; the needs and requirements of the supply and demand side of skills system, in addition to their potentials and capabilities are to be identified due to this sub-function. Then the long-term purposes of the national skills system are set in line with political, economic and social strategies. These priorities may include the content and/or means of delivery of the skills training in all levels.

- ***Planning***

This sub-function specifically relates to goals setting and strategies to reach that goals. What actions by who must take place in order to get the objective? How different stakeholders should work together in order to reach the objective? What is the timing schedule? How budgets will be spent?

- ***Demonstration***

“Demonstration means social experimentation. It is the systematic attempt to test hypotheses concerning the likely impact of one or more strategies by actually trying them in at least a semi-controlled environment” (Abert 1974). In order to demonstrate, the policy-

maker should know the architecture of the whole system. Stakeholders in a certain institute or in a certain level of skills system are aware of their own role and the role of their affiliated organization; but most probably they cannot recognize the meta-patterns and interactions that take place in broader areas of the system. Hence, people and organizations--as the individual stakeholders--face difficulties in identifying the obstacles to implement a certain program. So, measuring the network that policies and programs are implemented in is an important aspect in demonstration because these measurements leads the policy-maker to identify the obstacles that the programs may face with. Studying the information networks, system analysis and game theory (Ozdoglar 2008) leads us to the fact that enhancing the process of strategy implementation does not necessarily need measures in broad range and high levels, rather it requires focused actions which lead to small modifications in some stakeholders of the system.

- *Evaluation & Accountability*

The goal of evaluation and accountability sub-function is to measure, rate and judge about the functionality of the various components of the system based on the rules and regulations. Evaluation is a requirement of planning: how successful were the strategies? Should modifications be made in the strategies or implementation? Moreover, every policy-maker in any system—national/local/global—apart from the results that are gained because of their strategies, has to response about their decisions: why did they allocate the scares resources in that way? Accountability gives legitimacy to a system. Evaluation is a pre-requirement of any accountable management approach.

1-2 *Regulation*

Regulation function in this model is about monitoring, assessment, and refinement of rules of the skills system rather than ad-hoc operations (Levi-Faur 2011). The sub-functions of regulation function are: setting professional qualification standards; evaluation and certification of professional competence; developing rules and regulations for the national skills system; setting vocational training standard; monitoring and quality assurance of skills training services.

- *Setting Professional Qualification Standards*

In the modern professional training approach, the system that people gained their professional qualifications, itself, is not important (Foley 1999); rather a method that certifies their qualification plays a pivotal role. To do so, a standard is needed to define the type and class of professional competency. Professional qualification standards are prominent examples of these kinds of standards, that make the lifelong learning objective approachable, and comparison facile. One example of these kind of standards is the national qualification frameworks (NQF).

- *Evaluation & Certification of Professional Competence*

In the national skills system, in order to utilize the professional qualification standards, an evaluation and certification unit is required. This unit examines the competencies of people whether gained through recognized prior learning or other means of informal/non-formal training.

- *Developing Rules and Regulations for the National Skills System*

The national skills system, due to its complexity, multiple stakeholders in different levels, and being in vicinity of other system (labour market and goods/services market), requires coherent and adapting rules. These rules must guarantee proper cooperation and collaboration among various stakeholders to gain the ultimate goals of skills system that are decent work, productivity, and competitiveness improvement (Hardt 1995).

- ***Setting Vocational Training Standards & Regulations***

Training is the core element of the national skills system. In order to reach cohort vocational skills at the national level, training should be regulated by the national qualification standards. Only by these standards and regulations, the vocational skills training part could be linked to academic education.

- ***Monitoring & Quality Assurance of Skills Training Services***

Due to the complexity of the skills system, and the pivotal role that skills training plays, quality assurance of this part has direct impact on the effectiveness of the whole system.

1-3 *Facilitation*

Facilitation is about encouraging open discussion among people with various viewpoints to review different hypothesis and options. Facilitation often is done by development-orientated organizations in a system including non-governmental organizations, industry councils, employees and governmental agents (Rhodes 1996). The authors developed the facilitation function in the national skills system through the following sub-functions: facilitation the inter-sectoral and cross-sectoral communication and coordination;

reinforcement of social and cultural infrastructures; facilitation the exchange of the labour market information, Facilitation the access to financial resources.

- ***Facilitation the Inter-sectorial and Cross-sectorial Communication & Coordination***

Due to the complexity of the national skills system, communication and coordination among stakeholders cannot be reached only by hard norms such as rules and regulations. Participants need be harmonized in order to get the ultimate goals of the system by more facile and workable tools. Even in a single sector proper communication and coordination of participants cannot be reached without soft facilitation tools.

Cross-sectorial coordination is the core element to reach equity in skills trainings especially if the situation depends on the decision of different sectors. It consists of vertical coordination and horizontal one.

- ***Reinforcement of Social and Cultural Infrastructures***

Skills system is about the everyday life of many people. What they do to earn their livings and how they do that. Hard norms such as rules and regulations are at the second importance when it comes about personal decisions. Social and cultural believes and attitudes conduct the society at a deeper level. Hence, an effective skills system needs to interact and be in harmony with social and cultural norms.

Since building social and cultural infrastructures is about changing believes, attitudes and structures, it requires systematic long-term approach rather than ad-hoc actions.

- ***Facilitation the Exchange of Labour market Information***

Having the information of the demand and supply side of the skills system in hand, is essential not only for policy-makers but also for other planners, managers and stakeholders in different levels of the skills system (Sparreboom and Powell 2009). Labour market information system (LMIS) seeks the following strategic goals: clarification the needs and potentials of every part of the skills system; quick access to job offers and job requests; speed-up the process of matching employers and job-seekers; provide relevant information about employment, unemployment and labour migration.

- ***Facilitation the Access to Financial Resources***

Vocational trainings due to its practical and workshop-based nature (which requires trial and error), rapid technological reformation, need of large spaces, requires more finances than other types of trainings. So, one of the most important supporting functions in every national skills system is the financing that has many types according to their source, organizing, spending, and resulting.

Financing of skills programs have different forms (Paik 2016, Lange, Ottens, and Taylor 2000, Lerner, Leamon, and Hardymon 2012, Jones 2007), including but not limited to: utilization of training fund borne by private firms, incentives to induce employer's, employee's and unemployed's active participation in training, financing by local resources, selling the products in advance. Recognizing these resources and allocating them properly, is a facilitation sub-function.

1-4 *Service Provision*

Actors, participants and stakeholders of a system are involved in processes that their ultimate goal is to respond to a need: providing goods/services. These processes have strong linkages with the main functions of the system. The authors introduce the sub-functions of

service provision in skills system as: provision of training services, provision of apprentice services, developing businesses (where the developed skills are to be used), provision of labour market information and job finding.

- ***Provision of training services***

Training is the heart of any skills system and has close linkage with “developing relevant skills”--one of the skills development pillars. This service delivery occur in three forms: formal, informal, non-formal. Lifelong learning (Field 2000), fostering quality and equity (Schleicher 2009), strengthening innovation, productivity and social inclusion are all important parameters of a proper training provision (Mittler 2012, Walberg 1980, Ferrari, Cachia, and Punie 2009).

- ***Provision of Apprentice Services***

Apprenticeship helps individuals to get essential trainings and facilitate the access to job opportunity and schools to work transition. In fact, apprenticeship is the bridge between training centers and workplace (Lerman 2013).

- ***Developing Businesses***

This sub-function is developed from the main function “using these skills effectively in the economy and society”. Workforces and businesses are the demand side of any skills system; effective utilization of skills in the demand side help the overall system work properly. High quality jobs motivate individuals, actors and stakeholders to better participate in skills system governance.

- ***Provision of Labour Market Information and Job Finding***

This sub-function is developed from both “using skills effectively in the economy and society” and “developing relevant skills” main functions. Labour market information not only help employees to regulate themselves with the job-market, and employers to develop plans for their human resource strategies, but also assist policy-makers to gain subtle decisions.

5. Diagnosis

1-1 Actors, Structures and Institutions

The structures and institutions of Iranian skills system has changed considerably over-time. As the followings, the current key actors are introduced and their role and impact are analyzed.

- ***Ministry of Labour and Social Affair (MLSA)***

Policy-making and planning, monitoring and implementing measures in order to regulate the labour relation, solving the problems of labours, preserving and protecting the workforce, increasing the share of cooperative sector in national economy, supporting employment development, and establishing an inclusive system of welfare and social security are among the duties of Ministry of Labour and Social Affair. This institution plays a pivotal role in skills development due to its policy-making, regulation and financing functions. MLSA also have linkages with other institutes like private career agencies, Technical and Vocational Training Organization (TVTO); Ministry of Science, Research and Technology (MSRT); and Supreme Council for Cultural Revolution (SCCR).

- ***Technical and Vocational Training Organization (TVTO)***

TVTO's main task is providing vocational training and research through 1 to 18-months courses in: permanent centers of the public sector (702 centers nationwide), mobile training teams (in remote areas), training in prisons, training in garrisons, training in industries, training in Instructor Training Center (ITC) and private training institutions (14 thousand institutions authorized by TVTO). TVTO trains skilled and semi-skilled labor force which is needed by industry, agriculture and service providers throughout the country.

The responsibilities and missions of TVTO are: to prepare the technical and vocational development plans; to establish and develop educational centers (basic and advanced ones); to prepare curricula and teaching sources based on the national standards of occupations; to observe the executive standards, including the trainer, space, equipment and instruments in accordance with the vocations and skills modules in all of the educational sections of the organization; to provide the required educational and job consultancy services for learners; to supervise the covered educational centers based on the regulations; to organize the national skills competitions; and to conduct fundamental and practical researches about human resource development of the country.

- ***Private Career Agencies (PCA)***

Office of Job-Placement was founded in the former Ministry of Labour in Iran in 1955. It took 8 years till 1963 that private job-placement agencies began their activities in Iran. In 1979 these agencies were terminated and their duties transferred to Labour Authorities in each city. Again, at 1998, Supreme Council of Labour passed a law to regulate the activities of private job-placement agencies. These private agencies now work under supervision of MLSA.

- ***Ministry of Science, Research and Technology (MSRT)***

MSRT is responsible to consolidate the administrative affairs, and also policy-making of the science, research and technological activities in Iran. MSRT has linkages with so many skills system participants--all the universities in the country with academic approach, in addition to University of Applied Sciences, and Technical and Vocational University are under the supervision of MSRT, to name but a few.

- ***National Organization of Educational Testing (NOET)***

NOET is a governmental organization affiliated to MSRT. It is responsible for management of many test takings in Iran; including international tests, tests for comprehensive national entrance exam for universities. NOET has three divisions: 1- administrative division, 2- technical & research division, and 3- selection division.

- ***Ministry of Education (ME)***

ME is one of the most important stakeholders of vocational skills training in Iran. All the schools which educate and train children from age 5 to 18, in addition to secondary vocational schools, are under the supervision of ME. Office of Vocational & Technical Training and Office of Secondary Vocational Education & Training are divisions of the ME Department of Secondary Education. Frahangian University—which was established by integrating Teacher Training Centers—provides human resource mainly as teachers for ME.

- ***The Supreme Council of Cultural Revolution (SCCR)***

SCCR as a cross-ministry council has the policy-making role in cultural, educational, and research issues in Iran. Their decisions are conducting as rules. They are recently

conducting a research to develop and modify vocational training system in Iran. This council set strategic planning for ME, MSRT, and MLSA.

- ***Ministry of Culture & Islamic Guidance (MCIG)***

MCIG has the overall responsibility of policy-making and regulation in issues related to art and culture; for instance, as it relates to skills development, they make rules of conduct for the private art schools and certify them.

- ***Management and Planning Organization of Iran (MPO)***

Formerly known as the Plan and Budget Organization (PBO), the MPO had a variety of goals and duties, including evaluation of the country's resources, preparation of its medium and long term development plans and policies, preparation of annual budgets, and monitoring and evaluation of work done under the implemented plans. MPO monitors and evaluates the function of MLSA and NIPO.

- ***National Iranian Productivity Organization (NIPO)***

NIPO, as a governmental organization, is responsible for planning, policy-making, conducting, monitoring, and evaluating of all economic actors and production agents including: human capital, finance, energy, water and soil. The main goal of NIPO is to set productivity standards, raise the productivity in all economic, social, cultural, governmental and non-governmental sectors based on supreme laws, policies, and strategies. For the national skills system, NIPO determines the roles and responsibility limits of the governmental and non-governmental sectors based on supreme rules and regulations, designs

and implements human resource management processes, and professional qualification system.

The distribution of the functions and sub-functions between different actors is called “institutional mapping” (Aligica 2006). The institutional mapping table of the Iran Skills system is presented on table 1.

1-2 *Analyzing the Institutional Mapping of Skills System*

In analyzing the institutional mapping of the skills system, the authors examined the following questions in each sub-function:

- Is there any sub-function that has not been assigned to any actor?
 - In a specific sub-function: which actors are taking part? Is a single function assigned to too many actors? In case of institutions plurality, is there any need of an integrated management between the actors?
 - In a specific sub-function, is there any need for a centralized entity?
 - Can non-governmental organizations be substituted for the governmental ones?
-
- *Policy-making*

Since the education and training system in Iran have different trustees in formal and non-formal divisions, the attitudes and approaches of planning in these divisions are different. There is need for integrity at national level, specifically for technical and vocational skills training due to its non-formal and informal nature. In this regard, Ministry of Health and Medical Education (MHME), by formulating policies and planning for human resource training activities in health sector, is shaping the education and training system policies in their action area. Unfortunately, lack of a single institute to shape non-formal vocational

training policies in the country caused divergent. There is no opportunity for integrated and inclusive planning of education and training system without any coordinating instrument; every single ministry acts separately.

Not only the planning sub-function, but also evaluation and accountability suffer from lack of a single responsible referee. Without evaluation the old policies, the policy cycle is not complete—no clear feedback from previous implemented policies (Cairney 2011).

There are some organizations and ministries that are responsible for institutionalizing the skills system in their field of activity: The Supreme Council of Cultural Revolution (SCCR), Ministry of Labour and Social Affair (MLSA), Ministry of Science, Research and Technology (MSRT), National Organization of Educational Testing (NOET), Ministry of Energy, Vice-Presidency for Science and Technology (VPST), to name but a few. Ministry of Education, although has strong effect on regulation and facilitation of skills system, should play a more active role in policy-making—specifically institutionalizing—due to its mission as a ministry.

- ***Regulation***

The active institutes in regulation function are: Ministry of Labour and Social Affair (MLSA), National Organization of Educational Testing (NOET), Ministry of Education (ME), Ministry of Industries and Business (MIB), Ministry of Health and Medical Education (MHME), Ministry of Energy (ME), Ministry of Culture and Islamic Guidance (MCIG), Vice-Presidency for Science and Technology (VPST), National Iranian Productivity Organization (NIPO), Civil Aviation Organization Of Iran (CAOI), and Ports and Maritime Organization of Iran (PMOI).

In a closer look, it could be perceived that “monitoring and quality assurance of skills training services” and “setting vocational training standards and regulations” are somehow

cross-sectoral—different institutes with different strategic policies are involved. One of the reasons of this phenomenon is that some regulation sub-functions, such as “monitoring and quality assurance of skills training services” and “setting vocational training standards and regulations” require a broad vision about issues and challenges in different areas. These challenges are professional and competency standards; aligning with technological development and future needs; create suitable atmosphere to communicate with formal education and training system; evaluation and quality assurance of skills system.

Specifically about evaluation and quality assurance of vocational trainings, since this sub-function requires monitoring of all the actors in regulation processes, it should occur in a wide range of fields and domains; which means so many actors will involve. An inclusive professional competency system and validation of vocational training agencies are two important means to reach quality assurance in vocational skills training. The former demands a profound network of sector councils and facilitation agencies in a hierarchical system, both vertically and horizontally; the latter can be reached through this network too.

Although pluralism of institutes also occurs in “setting vocational training standards and regulations”, but other regulation sub-functions are mostly limited to three profound institutes: Ministry of Education, Technical and Vocational Training Organization (TVTO), and National Organization of Educational Testing (NOET). Among these three institutes, although in a legal perspective the main responsible institutes in technical and vocational skills training field are Ministry of education and Technical and Vocational Training Organization (TVTO), more investigation shows that TVTO is involved in different regulation sub-functions because of necessity to fulfill their tasks. However these types of TVTO’s activities have no legal support.

In spite of the above discussion, it seems that the regulation function gained little attention from the legislator so far so that the regulation sub-functions are not assigned to a specific ministry or institute.

Some sporadic activities like: monitoring and evaluation, establishment and certifying new vocational training centers are seen in some of the institutes' duties; but, especially what TVTO is doing in the regulation field indicates the lack of a single regulatory actor in Iran's skills system—in a legal perspective, TVTO was not established to act in regulation field; what this organization is doing totally arise from urgency. There is a need for a single regulatory organization, but deciding about the level of interaction and authorization is an important issue itself.

In summary, it seems that due to TVTO's capacity—as a MLSA affiliated organization—and due to one of the policies of Article 44 of the constitution¹, there is a necessity to establish an organization with regulation specialty to act at national level.

- ***Facilitation***

The institutional mapping of skills system management in Iran shows plurality in facilitation function. Many of these actors and organizations are legally responsible in facilitation function, while some other are involved just because of urgency. It can be perceived that in many facilitation sub-functions, such as reinforcement of social and cultural infrastructures, many organizations are involved. The present institutional mapping indicates that Technical and Vocational Training Organization (TVTO), Union of Professional Association of Private Vocational Training Centers (UPAPVTC), and Deputy of Employment and Self-sufficiency of Imam Khomeini Relief Committee recognized facilitation sub-functions very good and took part. However, their participation in

¹ This article divides Iran's economic system into three sectors: public, private, co-operative. On June 2006, a new interpretation from this article was developed that is known as "Privatization Law".

“facilitation the exchange of the labour market information” and “reinforcement of social and cultural infrastructures” is not legally supported.

One of strengths of Iran’s skills system in facilitation function is that the “facilitation the exchange of the labour market information” sub-function is legally supported for the involved actors. It is obvious that if few actors were obliged to participate in “facilitation the exchange of the labour market information”, management of this sub-function could be more difficult.

In the sub-function of “facilitation the inter-sectoral and cross-sectoral communication and coordination”, just Ministry of Education (ME) and Vice-Presidency for Science and Technology (VPST) have proper functionality in comparison with other actors of national skills system. More profound instruments for facilitation at national level are necessary to define the coordination pattern for each participant.

- ***Service Provision***

Skills training in Iran is mainly provided by Ministry of Education, University of Applied Science and Technology, private vocational schools under the administration of TVTO, and some Ministries. TVTO is the only apprenticeship provider. Private career agencies have sporadic contributions to provide labour market information. No organization is responsible to develop businesses to utilize the developed skills.

Low quality skills trainings; low motivation between training providers; lack of diversity in skills training specially for girls and women; low-pace job-findings and weak linkages between supply and demand side of skills system due to inadequacy of labour market information; small share of in-formal skills trainings in comparison to the formal trainings; lack of proper support for business development are some of the most important problems of skills system provision.

6. Conclusion

Using a new framework, the authors attempted to evaluate Iran's skills system governance. They introduced 4 supporting functions (governance functions) as: policy-making, regulation, facilitation, and service provision. By institutional mapping of the national skills system; studying skills-related laws, regulations, and acts; and fact-finding interview sessions with experts of the system, the main shortages of Iran's skills system governance were known as: absence of legal support to guarantee the enforcement of the laws and regulations, lack of proper coordination between the suppliers of the skills system, absence of quality assurance system and national professional standards, regulation failure, passive involvement of the private sector, neglecting the importance of human capitals in socio-economic development from policy-makers, lack of proper labour market information, infrequent following up from the government to implement legislations, inadequate legal supervision on the implementation of the national development plans, lack of clarity in legal duties of some executive organizations, absence of "skills act" and a unit policy-making and coordinator organization in national skills system. Finally they argued that an integrated approach to national skills system governance—in legal, implementation and administration fields—is a key factor to ensure economic development, since improving skills are so critical for developing nations.

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Table 1: Institutional Mapping of Iran's Skills System

	Policy-making					Regulation					Facilitation				Service Provision			
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Ministry of Labour and Social Affair (MLSA)	*	*	*						*	*				*				
Technical and Vocational Training Organization (TVTO)			*			*	*	*	*	*	*	*		*	*			
Private career agencies (PCA)															*			*
Ministry of Science, Research and Technology (MSRT)	*	*	*	*							*	*						
National Organization of Educational Testing (NOET)								*	*	*		*						
Ministry of Education (ME)			*			*	*		*		*	*	*		*	*		
The Supreme Council of Cultural Revolution (SCCR)		*		*		*	*		*		*	*						
Ministry of Culture and Islamic Guidance (MCIG)		*	*				*			*								
Management and Planning Organization of Iran (MPO)				*														
National Iranian Productivity Organization (NIPO)					*				*									
Ministries (Power Ministry, Ministry of Petroleum, Ministry of Agriculture, etcetera)															*			

Policy-making

- (1) Policy research and resources assessment
- (2) Identification of national priorities
- (3) Planning
- (4) Demonstration
- (5) Evaluation and Accountability

Service Provision

- (1) Provision of training services
- (2) Provision of apprentice services
- (3) Developing businesses to utilize the skills
- (4) Provision of labour market information and job finding

Regulation

- (1) Setting professional qualification standards
- (2) Evaluation and certification of professional competence
- (3) Developing rules and regulations for the national skills system
- (4) Setting vocational training standards and regulations
- (5) Monitoring and quality assurance of skills training services

Facilitation

- (1) Facilitation the inter-sectoral and cross-sectoral communication and coordination
- (2) Reinforcement of social and cultural infrastructures
- (3) Facilitation the exchange of the labour market information
- (4) Facilitation the access to financial resources

Table 2: List of laws, regulations and acts that are related to Iran's national skills system

No.	Date	Reference	Acts, Rules and Regulations
1	1970	Senate	Apprenticeship Act
2	1979	Parliament	Constitution of the Islamic Republic of Iran
3	1980	The Revolutionary Council	Establishment the Organization of Technical Education and Human Capital Act
4	1980	The Revolutionary Council	Establishment of the Supreme Council of Technical and Vocational Training Coordination
5	1986	Council of Ministers	Establish and Run Vocational Schools Act
6	1987	Parliament	The Ministry of Education Act
7	1988	SUPREM COUNCIL OF CULTURAL REVOLUTION	Directive on Specify the Institutions which are Responsible for Employment of Youth with High School Diploma
8	1990	Parliament	The 1 st Economic, Social, and Cultural Development Program Act of IRI
9	1990	Expediency Discernment Council	Labour Law
10	1990	Parliament	Unemployment Insurance Act
11	1990	SUPREM COUNCIL OF CULTURAL REVOLUTION	Reformation of Secondary Education System Act
12	1992	Council of Ministers	Cooperation of Ministries, Organizations and Educational and Manufacturing Centers to Implement the New Secondary Education System
13	1992	SUPREM COUNCIL OF CULTURAL REVOLUTION	Vocational Teacher Training Center Act
14	1993	Supreme Administrative Council	Integration Coordinating Council of Technical and Vocational Education and the Higher Council for Scientific Education to Form Supreme Council of Applied Functional training
15	1995	Parliament	The 2 nd Economic, Social, and Cultural Development Program Act of IRI
16	1995	Parliament	Engineering and Building Control System act
17	1995	SUPREM COUNCIL OF CULTURAL REVOLUTION	The Supreme Council of Applied Scientific Education Act
18	1997	SUPREM COUNCIL OF CULTURAL REVOLUTION	Approvals of SUPREM COUNCIL OF CULTURAL REVOLUTION for Applied Scientific Training
19	1997	Parliament	Commitment to Learn Vocational Skills for Employment Law
20	1998	Parliament	Supreme Council of Employment Act
21	1999	Council of Ministers	Transforming Organization of Vocational Training and Human Capital to TVTO and Establish Deputy of Planning and Employment in MLSA
22	2001	Parliament	The 3 rd Economic, Social, and Cultural Development Program Act of IRI
23	2002	Council of Ministers	Transformation in Iran Administrative System Act
24	2003	The Supreme Leader	Vision of Islamic Republic of Iran in 2025
25	2004	Parliament	Goals, Duties and Organizational Chart of MSRT

No.	Date	Reference	Acts, Rules and Regulations
26	2005	Parliament	The 4 th Economic, Social, and Cultural Development Program Act of IRI
27	2007	Parliament	Civil Service Management Law
28	2009	Supreme Administrative Council	Establishment of National Skills Organization Law
29	2010	Parliament	Student Admission in Vocational Training Centers and Teacher Training Centers Law
30	2010	The Supreme Leader	The General Policies of Administrative System
31	2010	Parliament	Organizing and Protecting Domestic Jobs Law
32	2011	Parliament	The 5 th Economic, Social, and Cultural Development Program Act of IRI
33	2011	SUPREM COUNCIL OF CULTURAL REVOLUTION	Comprehensive Scientific Map of Iran
34	2011	Council of Ministers	Vocational and IT Training Regulation
35	2011	SUPREM COUNCIL OF CULTURAL REVOLUTION	Fundamental Reformation in Education and Training Document
36	2012	The Supreme Leader	The General Policy of Employment
37	2012	The Supreme Leader	The General Policy of the Domestic Production, Supporting Iranian Labor and Capital
38	2012	The Supreme Council of Education	National Curriculum Document (in Vocational Training)
39	2012	Council of Ministers	Regulation of Professional Competence System
40	2013	The Supreme Leader	General Policies of Resistance Economy
41	2013	Parliament	National Guild System Act
42	2013	The Supreme Leader	The General Policies for Reformation in Education
43	2014	SUPREM COUNCIL OF CULTURAL REVOLUTION	National Policies Action Task Force #14 from Grand Strategy #6 to Adjust the Capacity of Higher Education Institutions (with consideration of land use)
44	2014	Council of Ministers	Approval about Create Extra Jobs Commensurate with the Level of Expertise for Vocations
45	2014	The Supreme Leader	The General Policy of Population
46	2017	Parliament	The 6 th Economic, Social, and Cultural Development Program Act of IRI