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**Establishment and Implementation of National Qualifications  
Framework (Recommendation)**

**NATIONAL QUALIFICATIONS AND CREDITS SYSTEM CONSULTANCY TEAM**

Dr. Sudirman Yahya  
International Consultant

Tsagaach. G  
National Consultant



**PT.TRANS INTRA ASIA**

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Ulaanbaatar**



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## LIST OF ABBREVIATIONS

ADB	Asian Development Bank
ASEM	Asia-Europe Meeting
MECS	Ministry of Education, Culture and Science
NCEA	National Council for Education Accreditation
HEI	Higher Education Institution
HERP	Higher Education Reform Project
EU	European Union
GOV	Government
MGL	Mongolia
NQF	National Qualifications Framework
MoL	Ministry of Labor

## **INTRODUCTION**

It is vital requirement for countries across the world to develop and implement qualifications framework within the global economy with a continuous growing free market of product and service; unrestricted movement of capital, technology and skills and rapid growth of technologies of trasportations and communications.

The consultant team for NQF and Credit System is responsible for developing the National Qualifications Framework (NQF) of Mongolian Higher Education within the scope of Consulting Service for Higher Education Reform (CSHER), sub-project of Higher Education Reform Project (HERP) supported by Asian Development Bank (ADB) technical association. Therefore, we are presenting the proposal for NQF for Higher Education sector in Mongolia along with the developed recommendation of policy measures required for design and implementation of the framework, for all stakeholders.

It is, however, suggested that the development and implementation of NQF, that is agreed and discussed by all the stakeholders, includes all sectors of education and training and is followed at a national scope, can be addressed at the Government level, and the documentation proposal developed by us can be the initial stage of future progress. In order to achieve this, the state central agencies should focus on developing and improving the participation of Higher Education Institutions (HEIs) and enhance the progress of the Advisory Group that, and is comprised of officials of MoL and MECS, representatives of the employers' federation, various professional/industry associations, universities, and research institutes consists, established in October 2014, and the Task Force responsible for developing the document and procedure of NQF of Mongolia, established in November, 2015 by the decree of Minister of Labor.

We conducted the comparison research<sup>1</sup> on the selected four countries with implemented NQFs in order to propose the NQF for Higher Education sector in Mongolia. The research was also used as a basis research for development of this proposal and recommendation.

It has been some time, since the vocational education and training sector developed the foundation of the qualifications framework and established and started

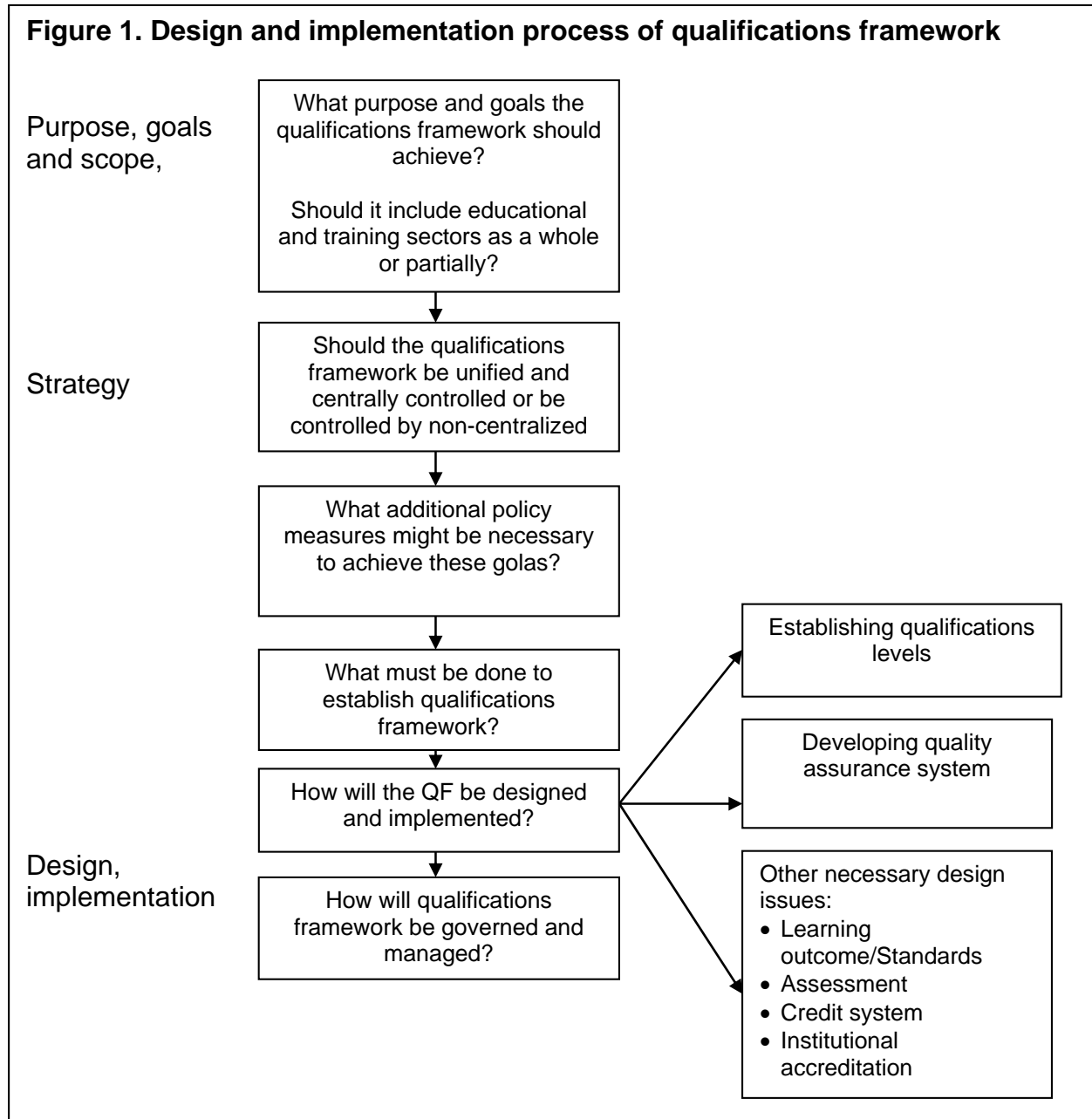
implementing their skill/output based programmes; if the NQF is implemented within all education sectors of Mongolia, then the higher education sector shall endeavour to achieve the same result as the vocational education and training sector. That is because, output/skill based training is a relatively new concept for higher education sector and it is required to establish and implement the qualifications framework by strengthening and improving the quality assurance system within the scope of improvement of higher education system and its delivery. In higher education sector, this can be started with experimenting on a certain qualification as some countries' practices. For example, Indonesia has initially applied the implementation of their NQF on selected sectors: the nursing, accounting and tourism; based on their importance, opportunity of implementation, influence and ability to present. (ACDP, 2015).

Establishment of an NQF may be seen not so complicated from mechanical view, however, it is important to remember that funding required amount of cost and institutional resources for successful implementation can become quite difficult and require massive effort for developing countries. (ILO, 2007)

As a final note, many countries across the world are largely involved in creating and implementing NQFs and number of practices show that the NQFs are approved by the Governments with few examples of presidential regulations. This has clearly been a great contribution for the implementation of NQF and Mongolia should focus on approval and regulation By the Government once the documents are developed for NQF. As an example, attached is the policy for establishment and implementation of Indonesian NQF approved by the regulation of the President of Indonesia.

## **ESTABLISHING AND IMPLEMENTING NQF**

The following flowchart presents the common practice of conceptualizing and implementing qualifications framework based on other countries' experiences and this can be used for any type of qualifications framework (include one particular sector of education or include all of educational and professional sectors).



As presented in the flowchart, design and implementation process of qualifications framework can be followed in a linear process and it is recommended that Mongolia should develop and implement its NQF following these stages. However, in reality, this process might be not as simple linear process and it is important to remember that in some cases, decisions made or problems arising at particular stages

can necessitate reviewing decisions or views reached at an earlier stage. The problems require attention for each stage are mentioned below.

## **PURPOSE AND SCOPE**

The purposes and goals are outlined based on the requirements and expectations. Many countries that have developed and implemented an NQF were concerned with the poor articulation between qualifications and actual skills needs in the workplace. Some countries, such as Jamaica, Trinidad and Tobago, Ghana, and South Africa, needed to rectify the poor credibility and quality of existing qualifications and training programs. Many other countries, e.g. England, were more concerned with a lack of coherence and the rather fragmented nature of the qualifications system. There are other requirements for establishing an NQF, where a large part of the population had been excluded from the formal education system or where there was a high number of school dropouts, recognition of their non-formally acquired skills and facilitating their integration into the formal system were major concerns (South Africa, Slovenia).

Furthermore, requirement and interest for creating a regional common labor market and agreements and contracts between regions, also created an impetus for regional countries to create or modify their NQFs by taking account of regional comparability and compatibility (e.g. EU, Caribbean Community). These are some examples of various requirements and purposes of the implementation and development of NQFs around the world.

It is clear that listing all problems to be solved can be difficult and therefore, the problems are to be appropriately determined and prioritized according to their objectives and the solutions should be defined how to overcome the issues. As advised by Ron Tuck (2007), the following analysis can be conducted for potential problems.

**Table 1. Analysis examples for problems**

Problem faced (determining the problem)	What exactly is the problem? (defining the problem)	How might a qualifications framework help to address and solve the problem?  (Determining the type of solution)
Are learners having difficulty in progressing through the education and training system?	If yes, in which sub-sectors of education and training; or between which sub-sectors in order advance for next level? In order to create a foundation for entry to more advanced qualifications, is there a need to develop new qualifications? Or a need to develop and improve the current qualifications by combining? Or is there a need to introduce the qualifications framework to the stakeholders in more details for clearer understanding?	For example:  Using the implementation of the NQF as a method for introducing new qualifications to fill gaps in progression routes.  Establishing collaborative arrangements to improve articulation and comparability between qualifications and to improve information and guidance to learners.  Producing clear information for stakeholders .
Are there significant variations in the quality of education and training provided by different institutions?	If yes, in which sectors of education and training? Which qualifications have more of the problem compared to the other areas?	For example:  Requiring that all institutions offering NQF qualifications be nationally accredited

*Source: Ron Tuck (2007)*

Once the problems are determined, then purposes and goals can be outlined in details. As mentioned above, the requirements and needs of establishing and implementing qualifications framework vary for each country, however it is common that they are aiming to provide the following two main sets of reasons to implement NQF:

1. Promoting life-long learning.
2. Supporting quality assurance and recognition of qualifications.

The requirements for establishing national qualifications framework in Mongolia



include: the current economical decline; a demand of skilled labors; an increasing number of unemployed higher education institutes' graduates; a need of international recognition on national education and training and a necessity of membership of some regional unions and committees (e.g. ASEM). Once the problem is formulated, the first approach would be to define the detailed purpose and goals.

One of the issues that needs to be defined within this stage is **scope of qualifications framework**. In case of establishment of NQF, it will include all sectors of secondary education, vocational education and training (formal, non-formal and short training) and higher education. It is a common practice that many countries do not include their pre-school education in the NQFs because, pre-school education system does not normally lead to the award of qualifications. (ILO, 2007) However, it is important not to ignore the assessment for the pupil attained knowledge and skills from pre-school education system.

There are practices that some countries will elect to begin by building and implementing a qualifications framework in one sector of education and training and then introduce gradually towards all other sectors based on their previous experience. Similarly, Mongolia established and implemented the qualifications framework that include vocational education and training in 2011 within the scope of Millennium Challenge Account. The design work for NQF has established over a year ago. In general, the delayed process of the design work is directly impacted by the poor organization and lack of understanding about qualifications framework.

The most important benefit of establishing and implementing an NQF that includes all sectors and types of education and training is to ensure and support the collaboration of educational and training sectors and the NQF can be fully utilized to serve the country's long term goal. However, it is important to note that trying to reconcile differences between the sectors can be challenging and can lead to considerable conflict and controversy, as the sectors have different traditions and interests.

## **STRATEGY**

Prior to starting the establishment of NQF, various elements are required to be addressed as which strategy is needed to be employed. For example, whether how the sub-sectors' qualifications reflected within the qualifications framework; independent or unified? Or, whether the qualifications framework is intended to be a tightly organized method to be followed as a standard or not? Once the strategy, to follow related to these problems, is defined, then it will become clear to determine which governance the NQF is going to take and how to organize the management of the framework.

### **Tracked, Linked and Unified qualifications framework**

Structurally, NQF can be classified as a) tracked-vocational and general education organized in separate and distinctive qualifications, b) linked-different qualifications exist with emphasis on similarities and equivalence, and certain common structures or credit transfer between qualifications and c) unified–no distinctive qualifications and unified qualifications system. (Howieson, C., Raffe, D.1999).

Traditionally, most countries favored tracked systems because their subsectors of education were seen as distinct and largely unrelated. However, the expansion of education sector and training opportunities and methods have led most countries in the direction of linked or unified qualifications framework.

Australia has linked systems and in Scotland, secondary schools and vocational education and training provision is unified, while the relationship with higher education is linked. Therefore, these countries are the classic examples of mixed qualifications frameworks. (Ron Tuck, 2007).

The choice between linked or unified approaches should be related to the purposes of the qualifications framework. If the purpose is to achieve certain aims across all types of qualifications, then a unified system may be preferred. If the aim is solely or mainly to create reasonable articulation of qualifications across the various tracks and hence improve progression by credit transfer and recognition, a linked approach may be adequate.

As for Mongolia, we recommend a linked qualifications framework is more

suitable. Establishment of this type of qualifications framework will not only lead to a provision of opportunity for students and employers to progress within their studied discipline/sector but also create the path between other qualifications.

### **Tight and loose qualifications frameworks**

A second issue to be distinguished is to either create a 'tight' qualifications framework, which enforces for all as a standard (e.g. Thailand, Indonesia), or to introduce a 'loose' qualification framework that is followed within certain systems (e.g. Australia, Scotland). The application of a qualification framework also depends on the purpose.

The quality of education and training process is very important for all of Mongolia, and there is a need to improve the collaboration between educational subsectors and qualifications; hence it is recommended that Mongolia should employ the 'tight' qualifications framework.

According to international practices, NQF is more practically valuable when the distinction between educational subsectors is clear, and it can be provided either by establishing a unified and loose qualifications framework or a linked and tight qualifications framework. (ILO, 2010)

Unified and loose qualifications frameworks can be developed and implemented under one and only government or an authorized body; and linked and tight qualifications frameworks can utilize different institutes for various educational subsectors and it will require an authorized national committee or board to provide unified management, create general policies for serving educational sectors and to organize credit transfers and recognitions.

### **Other policy measures that required to be determined**

A NQF is only a part of a national qualifications system of the country. Therefore, it is important to design and implement the *other necessary policy and strategy* within the scope of a qualifications framework from the beginning in order to utilize the NQF as a vital instrument for education reform. For example, make required amendments and

changes to the educational laws and regulations, create quality assurance system, and determine the coherence of the qualifications framework with other frameworks and processes etc.

Do not forget that enhancing only impact and role of the NQF towards education reform without collaborating with the other policy measures can lead to an unsuccessful implementation.

According to the experiences of other countries, the following policy measures are required to be implemented along with NQF establishment:

**Other policy measures to be determined in relation with implementation of NQF.**

- Ensure that the laws, policies and regulations applying to education and training are consistent with NQF purposes and goals;
- Create and maintain policy and strategy coherence across central government agencies (especially MECS and MoL);
- Establish and provide adequate funding for the NQF development process at both national and institutional level;
- Ensure that the funding regime encourages institutions to act in ways that support the policy goals (e.g. incentives to widen access to various levels of social groups);
- Ensure the implementation of the NQF is consistent with current good practice in institutions as well as the policy goals;
- Take account of the logistical (e.g. timetabling) and required resource constraints facing educational and training institutions;
- Provide support for education and training institutions such as provision of learning materials and professional development;
- Support learners to deal with financial, social and domestic constraints during their studies.

According to the experiences<sup>2</sup> of countries implemented NQF and from various stages (Indonesia, Thailand, Australia and Scotland), the elements of establishment and implementation of an NQF vary depending on the country's context and other policy measures. These elements include: the provision of implementation and continuous

performance, the monitoring and assessment of the implementation, the support methods and effective utilization of quality assurance, the development of database, the collaboration of accreditation and quality assurance institutes and international cooperation.

However, all these four countries have established an autonomous authority/institution to take responsibilities of qualifications framework implementation, as for government/management of NQF. In order to introduce such a comprehensive system requires an authorized body. Therefore, many countries have established a National Qualifications Authority (e.g. New Zealand Qualifications Authority-NZQA, Scottish Credit and Qualifications Authority-SCQA, South African Qualifications Authority-SAQA).

Other countries decided to attach this task to a ministry and/or agency and allocate the governing in a non-unified method. Especially, countries in Latin America have attached this task to existing institutions, such as the Ministry of Education, Ministry of Labor, and National Training Organizations (GIZ, 2013).

The governance of NQF is directly dependent on how the legal framework of NQF is organized and developed and the structure of NQF, and some countries, such as Hong Kong and Australia, have organized their legal organization of qualifications framework are independent of their governments. There are two opportunities for developing qualifications framework independent of the Government:

- The apex body in charge of NQF shall be politically responsible for providing routine performance and implementation of NQF and introduction and promotion for public.
- The conditions are provided for not directly influenced by ministries, agencies and amendment of the state policy.

If the institute/unit, (council or committee etc.) responsible for qualifications framework on a national level, is established then the status of such body shall be quasi autonomous, and it is a common practice to operate as a non-government organization funded by the state and accountable for reporting its annual work and allowing the

government to conduct frequent audit within their finances.

It is also suggested by us that Mongolia should establish an agency/unit with same status and allocate the governance and management of NQF. A unified, autonomous national qualifications authority does not exist in Mongolia; despite the fact that it is essential for the development and implementation of a national qualifications framework.

The National Council for Vocational Education and Training, established in 2008, has overall responsibility for the NVQF. However, no significant progress has taken place in its development since its initial approval, which proves there is a lack of understanding that the qualifications framework/domain represents an operational system not just a simple conceptual model.

The institute/unit, responsible for qualifications framework on a national level, usually employ 8-16 members and some examples present even more members are appointed until the institute is well established. For example, during their initial stage of implementation, South Africa has appointed 25 members within the board. (ACDP, 2015)

The governance role is the setting of strategic direction in order to establish and implement an NQF as determination of certain policy will be provided with a support of NQF. However, the process of building an NQF may involve disagreements among social partners in which the government may not wish to get directly involved.

Second, an NQF will be more successful if it generates a sense of ownership among the social partners and education and training providers.

Within the scope of an NQF implementation process, the following four processes will be implemented.

1. Management and governance of NQF implementation
2. Learning outcome and qualifications standard development
3. Quality assurance of education and training institutes' services
4. Assesment and certification

The first set of functions is carried out by the agency responsible for NQF and the agency shall develop the policy and procedure for the framework; conduct assessment and monitoring of the implementation; develop the qualifications registration and database; deliver the related information to public and improve the public's understanding and knowledge and cooperate with international agencies and agencies with similar purposes.

MECS and MoL are the main participants of state, governance agencies for implementation of NQF and according to international experiences, it is not suggested that the semi-autonomous agency responsible for implementation of NQF directly accountable to two ministries; as that would result conflicts and non-accountability. Therefore, it will be necessary for the government to decide which ministry has the lead role for implementation of NQF, but also to create an effective internal policy co-ordination mechanism (establishment of a council between ministries etc.).

The requirement will rise for selecting the allocation of standardization, assessment and certification process (this is related to the certifications other than the diplomas and certificates awarded by the education institutes) to an apex body responsible for NQF (e.g. New Zealand and Scotland) or allocate to an independent agency/body (e.g. Indonesia and Australia). It may seem appropriate to allocate all the functions for one body based on the benefits; however, a National Council for Educational Standards and National Council for Certifications can be established under direct supervision of National Qualifications Framework Authority in order to achieve non-centralized organization and focus on the effective results, if desired. The assessment and quality assurance can be allocated for the Education assessment agency.

This is only a proposal from us, therefore, the governance of NQF shall be decided in relation to the implementation result and benefits and should be considered from various measures. The measures may include the fundamental planning of what types of occupations are required and the directions of those based on the job descriptions.

Finally, the budget and other necessary resources, for developing and providing routine and continuous operation of NQF, required to be determined and decided on governance and management levels.

## **INVOLVEMENT/PARTICIPATION**

The experiences of other countries have already presented that the participation of all stakeholders is very important for successful implementation of NQF. The process of developing a framework of qualifications must take into account the need to *foster trust* among the various stakeholders and provide transparency. An important and successful way to build trust and acceptance is to ensure that consultations with the participation of all stakeholders are organized at every level from the very beginning of establishing process of NQF.

In Mongolia, it is clear that the vocational and education sector has far better participation of its stakeholders (representatives of the employers' federation, various professional/industry associations, etc.). In order to convert the higher education qualifications to a result/learning outcomes based method then it is crucial to focus on providing the participation of stakeholders as it is vital to consider the rights and interests of employers and other stakeholders.

As mentioned above, the benefits of providing participation include the importance of involvement of related institutes and individuals within the implementation of NQF from the development phase. Also, according to the international practices, the common and successful practice for providing participations of stakeholders is to appoint the representatives of the stakeholders in the Board of the institute/agency responsible for NQF.

There are two approaches to appoint the members of Board or National council of qualifications framework for some countries. The first method is to simply appoint the representatives without considering any specific requirements of skills and knowledge of the representatives. The second method is to appoint the member based on the knowledge, skills and occupational sectors. For example, Australia initially appointed the members of its Qualifications framework council using the first approach and the



after certain period of time, started utilising the second approach by appointing the members based on their skills, knowledge, experiences and their occupational sectors.

It is recommended for Mongolia, to establish a Board within the Agency/institute responsible for the NQF and not only to appoint its members from 'representatives' of any certain institutes, but appoint the members based on their knowledge, skills and experiences as Australian practice.

Furthermore, encourage the professional association and committees' process with the NQF, in other words, the qualifications standards and learning outcomes of training; establish such associations and committees and provide their participations by organizing the large scope of conferences within every levels.

## **QUALITY ASSURANCE**

Quality assurance is one of vital component of NQF. Also, NQF can be seen as a general method for quality assurance of education. In other words, proving the qualifications awarded for students and employees meet the quality assurance is one of the general purposes of NQF and it is the base of confidence of stakeholders.

Three important measures of quality assurance are:

- Validation of qualifications (standards)
- Accreditation and audit of education and training institutions
- Quality assurance of assessment

**Validation of qualifications:** Basically, each qualification must meet certain criteria before they can be registered on the NQF. For example:

- *There is a requirement/need for the qualification.* Are the purposes of the qualification clear? Has there been consultation with stakeholders? Or is there other evidence that there is a need for the qualification?
- *The qualification has been designed so as to be fit for purpose.* Do the content and outcomes of the qualification match its purposes? Is the content up-to-date? Do the outcomes and standards reflect the identified needs? Is there evidence

that those who gain the qualification achieve the purposes, entry to a particular field of employment or to a higher level of education?

- *The required standards of attainment are appropriate and are consistently applied?* Are the standards required for the award of the qualification appropriate to its purposes and the expectations of stakeholders? Are there systems to ensure that these standards are applied in a reasonably consistent manner?

**Accreditation and audit of education and training institutions:** Accreditation procedures for institution and its programs have two principal purposes to ensure that the programmes leading to the award of NQF qualifications are delivered to an acceptable level of quality; and to ensure training institution continuously focus on their quality improvement.

Mongolian National Council for Education Accreditation (MNCEA) provides the purpose of *external quality assurance* for Mongolian higher education sector and produces the accreditation for both institutes and their programmes. However, there are two requirements for accreditation for HEIs, one the institutes must be accredited but accreditation for programmes is voluntary. MNCEA has established and implement accreditation guidelines with support of the stakeholders and these guidelines are the general requirements for educational and training institutes and their whole programmes.

Since the 'professional standards', followed and approved by Mongolian Agency for Standardization and Metrology, for each common qualification is no longer applied; the HEIs are not able to assure that the graduates are provided with knowledge, skills and attitude in line with standard and requirement of the stakeholders and employers, through their programmes/qualifications.

Although, some countries with NQFs such as Indonesia utilizes Board of National Education Standards, and the accreditation body (authority) uses the standards, approved by the authority, for accreditation of programmes/training qualifications. (ACDP, 2015). However, the students majoring in accounting and law shall be professionally (e.g. accredited accounting) trained in accordance with the policy,

procedure and standard developed by the professional agencies, committees and central state agency and prove that they achieved the quality assurance. This is a common practice for both Mongolia and other countries.

In Mongolia, it can be concluded that external quality assurance is more developed compared to the higher education sector's internal quality assurance and since the internal quality assurance is mostly absent apart from certain lead university, it is critical to develop and improve the internal quality assurance. **Quality assurance of assessment:** The assessment systems for assessing student's obtained knowledge, skills and attitude have caused more controversy and debate than any other single aspect of qualification framework, for the countries implemented NQFs. (ILO, 2010) The problems related to the assessment occurred where attempts have been made to change traditional assessment approaches.

Assessment of learners' knowledge, skills and attitude is a relatively specialized and technical subject, but it is useful for policy makers to understand the key principles and to be aware of potential problems in implementation of any assessment reforms.

The key principles of Assessment of learners' knowledge, skills and attitude include valid, honest and reliable assessment, practicability and profitability. The educational and training institutes should focus on establishing an assessment mechanism that provides the balance of these key principles and it might be expensive in some cases to achieve a full and high levels of principles at all times. (For example, achieving very high levels of reliability is expensive because it can only be assured by an increased number of checks. In other cases, the benefits of higher reliability of assessment cannot be justified by its high cost but necessary to be done). It should be also considered that some cases may present poor results.

Traditional systems inarguably relied too heavily on written examinations, specially for higher education institutions favoured on the process of theoretical understanding and knowledge of the student with this method. However, it is recently recognized that it is beneficial to employ a broader range of assessment methods, including more practical forms of assessment for skills and knowledge and as the

educational process is developing towards result and skills based outcome associated development of assessment methods and principles.

In other words, systematic evolutions of assessment are being employed with the aim towards assessment of learners' compatibility of obtained knowledge, skills and attitude as outlined within the publicly approved standards as mentioned above.

The criterion-based (explicitly assessed against detailed criteria) assessment plays a vital role for evaluating the levels and recognising *the learner's knowledge, skills and attitude through their prior learning*, which is one of the components of NQF. It is advised to understand that explicit assessment can lead to a complicated assessment process.

## INFORMATION AND PROMOTION

Qualifications framework is relatively new concept for Mongolia and it is important to employ campaign work for establishing appropriate understanding and knowledge of QF for stakeholders from the beginning and it will be useful for successful implementation.

As a final note, the general plan for establishing and implementing NQF of Mongolia was developed and proposed by STVET-1 project of EU in 2015. Since the planning and document development process is slowed down, it is recommended to reform the plan produced in 2015 as following and provide the implementation.

**Figure 1. Planning of establishment and implementation of NQF of Mongolia**

2015	Planning, development	organization Management, regulation Law and	promotion Introduction,	To lead/support
2016				
2017	Implementation			
2018				
2019				
2020	Monitoring, re-development			

Source: Reformed the planning proposed by STVET-1 project of EU in 2015.

(Tsagaach. G, Sudirman Yahya)