

# INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS

## GUIDELINE



Nepal Rastra Bank  
Bank Supervision Department

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## INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS

### 1. Introduction

- 1.1 During the last three decades, Nepalese banking sector has grown at a rapid pace with the entry of large number of banks and financial institutions. The growth is not only limited to the entry of the large number of banks and financial institutions but also the modernization of financial services and transactions. There is a need of timely adaptation of international best practices established specially in the areas of managing risk and capital level.
- 1.2 Basel-I framework was confined to the prescription of only minimum capital requirements for banks, the Basel II framework expands this approach not only to capture certain additional risks in the minimum capital ratio but also includes two additional areas, namely, the Supervisory Review Process and Market Discipline through increased disclosure requirements for banks. Pillar 2 (Supervisory Review) of Basel II framework comprises of Internal Capital Adequacy assessment Process (ICAAP) followed by Supervisory Review and Evaluation Process (SREP) of the same. Besides the major risks covered in Pillar 1, banks are required to determine their capital adequacy in relation to all material and inherent business risks and other risks related to external economic environment.
- 1.3 Banks are faced with the challenge of developing internal procedures and systems in order to ensure that they possess adequate capital resources in commensuration with all material risks posed to it by its operating activities. These procedures are referred as Internal Capital Adequacy Assessment Process (ICAAP) under Supervisory Review Process – Pillar-2 of Basel II. A well thought out execution of ICAAP can generate tangible competitive advantage to the concerned banks and financial institution.
- 1.4 ICAAP is understood as bank's internal assessment of capital that it considers adequate to cover all material risks to which it is exposed. The scope and coverage of ICAAP is much beyond the Pillar 1 in the sense that it not only covers the Pillar 1 risks (credit risk, market risk & operational risk) but also encompasses all material risks.

1.5 Given the background, this guideline provides some principles and components of Supervisory Review Process and ICAAP established for the best practices. Banks are required to exercise the best practices of risk management and demonstrate their strength to the market as well as supervisors. For this purpose, banks and financial institutions should develop their own internal policy, procedures and structures to manage the risk inherent in their business. The guideline considers that policies, procedures and structures may vary on the basis of nature, size and complexities of banking business. This is an extended form of pillar 2. New Capital Adequacy Framework 2007(Updated July 2008).

## **2. Internal Capital Adequacy Assessment Process (ICAAP)**

- 2.1 ICAAP is a set of policies, methodologies, techniques and procedures to assess the capital adequacy requirements in relation to the bank’s risk profile and effectiveness of its risk management, control environment and strategic planning. This includes basic requirements to have robust governance arrangements, efficient process of managing all material risks and an effective regime for assessing and maintaining adequate capital.
- 2.2 ICAAP should be all encompassing process taking into account all those risk areas which are not reasonably addressed under Pillar 1 of Basel II, while evaluating credit, market, and operational risks; and all those risks factors which are not covered under Pillar 1 process. ICAAP should also capture the impact of external business and economic environment.
- 2.3 The Basel II document of the Basel Committee also lays down the following four key principles with regard to the SREP envisaged under Pillar 2:

<b>Principle no.</b>	<b>Key Principles</b>
<b>1</b>	Banks should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels.
<b>2</b>	Supervisors should review and evaluate the bank’s internal capital adequacy assessments and strategies, as well as their ability to monitor and ensure their compliance with the regulatory capital ratios. Supervisors should take appropriate supervisory action if they are not satisfied with the result of this

	process.
<b>3</b>	Supervisors should expect banks to operate above the minimum regulatory capital ratios and should have the ability to require the banks to hold capital in excess of the minimum.
<b>4</b>	Supervisors should seek to intervene at an early stage to prevent capital from falling below the minimum levels required to support the risk characteristics of a particular bank and should require rapid remedial action if capital is not maintained or restored.

2.4 Principles 1 and 3 are related with the supervisory expectations from the banks while the principles 2 and 4 are related with the role of the supervisors under Pillar 2. The Pillar 2 (SREP) requires banks to implement an internal process, called the Internal Capital Adequacy Assessment Process (ICAAP) for assessing their capital adequacy in relation to the risk profiles as well as a strategy for maintaining their capital levels. The Pillar 2 also requires the supervisory authorities to focus all banks to an evaluation process, also called as Supervisory Review and Evaluation Process (SREP), and to initiate such supervisory measures on that basis, as might be considered necessary.

2.5 An analysis of the above-mentioned principles indicates that the following broad responsibilities have been cast on the banks and the supervisors:

**Banks' responsibilities**

- (a) Banks should have in place a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels
- (b) Banks should operate above the minimum regulatory capital ratios

**Supervisors' responsibilities**

- (a) Supervisors should review and evaluate a bank's ICAAP.
- (b) Supervisors should take appropriate action if they are not satisfied with the results of this process.
- (c) Supervisors should review and evaluate a bank's compliance with the regulatory capital ratios.

- (d) Supervisors should have the ability to require banks to hold capital in excess of the minimum.
- (e) Supervisors should seek to intervene at an early stage to prevent capital from falling below the minimum levels.
- (f) Supervisors should require rapid remedial action if capital is not maintained or restored.

2.6 ICAAP is understood as bank's internal assessment of capital that it considers adequate to cover all material risks to which it is exposed. The objective is to determine the economic capital required to cover all risks faced. While Regulatory Capital is the capital that the regulator requires a bank to maintain where as economic capital is the capital that a bank needs to maintain and is, in general, estimated using internal risk models

2.7 Therefore the term "Economic Capital" is frequently used as a proxy for Risk. Since, theoretically a bank could suffer losses causing a complete erosion of its asset value, it is reasonable to look at the erosion which would almost never happen. This forms the basis of Economic Capital measurement. The scope and coverage of ICAAP is much beyond the Pillar 1 in the sense that it not only covers the Pillar 1 risks (credit risk, market risk & operational risk) but also encompasses all material risks including pillar 2 and underestimation of pillar 1. Pillar 2 has more depth and far reaching consequences for the banks. The rationales behind ICAAP can be :

- ICAAP is an umbrella activity that encompasses the governance, management and control of all risk and capital management functions and the linkages therein.
- Strengthens the governance and organizational effectiveness around risk and capital management.
- Brings transparency on the capital assessment process by understanding the key drivers of capital requirement including oversight for reviewing and validating capital requirements.

- Supports opportunities to identify sub-optimal usage of capital across the organization.
- Creates the foundation and basis to have an informed view on capital requirements to state the Bank's position on capital adequacy against regulatory capital requirements.

2.8 The Supervisory Review and Evaluation Process (SREP) consist of a review and evaluation process adopted by the supervisor, which covers all the processes and measures defined in the principles listed above. Essentially, these include the review and evaluation of the bank's ICAAP, conducting an independent assessment of the bank's risk profile and, if necessary, taking appropriate prudential measures and other supervisory actions. This guideline seek to provide broad guidance to the banks by outlining the manner in which the SREP would be carried out by the NRB, the expected scope and design of their ICAAP and the expectations of the NRB from the banks with regard to the implementation of the ICAAP.

2.9 The ICAAP should be an integral part of bank operations and reflect how bank is managed and organized in practice. Some of the fundamental purposes of ICAAP are:

- to inform the Board about the ongoing assessment of the bank's risks, how management intends to mitigate those risks and how much current and future capital is necessary having considered other mitigating factors.
- to develop policy, practice, processes, system and plan to meet the regulatory and economic capital under the Pillar 2 of the Basel II Capital Accord
- to explain to regulatory authority about the procedure and methodology adopted for internal capital adequacy assessment process based on present and future risk profile of the bank .
- to ensure that bank management is exercising sound judgment and has set aside adequate capital for materials risks in accordance with their overall risks.

2.10 ICAAP and SREP are the two important components of Pillar 2. The ICAAP comprises a bank's procedures and measures designed to ensure the following:

- appropriate identification and measurement of risks;

- appropriate level of internal capital in relation to the bank's risk profile; and
- application and further development of suitable risk management systems in the bank.

### **3. Elements of ICAAP**

A sound risk management framework, which includes Board oversight, risk assessment, monitoring and reporting processes, and regular independent review of all activities carried out by the risk function, is the major building block of an ICAAP. ICAAP is a challenging exercise for banks; therefore, they will have to adopt a well organized structure to accomplish the task. Major elements of ICAAP are as follow:

#### **3.1 Boards and Senior Management Oversight**

- The Board of Directors (Board) is responsible for setting the risk appetite of the bank, and ensuring that the bank's business remains within the desired limits. Management should understand the nature and level of various risks that the bank is confronting in the course of different business activities and how this risk relates to capital levels. Accordingly, a sound risk management framework should be established specifying control measures to tackle each risk factor.
- Board and management shall jointly ensure that formality and sophistication of the risk management processes are appropriate in light of the bank's risk profile and business plan. They should put in place credible and consistent policies and procedures to identify measure and report all material risks that the bank faces. Board should ensure that the Policy Framework is comprehensive for key business and support functions, and establish a method for monitoring compliance of the same.
- Board is primarily responsible for ensuring the current and future capital needs of their bank in relation to strategic objectives. The strategic plan of the bank should clearly outline the bank's capital needs, anticipated capital expenditures, desirable capital level, external capital sources and must be in line with the bank's desired strategic objectives. Capital plan should also take into account the dividend policy and planned growth while determining the adequate capital level.

- Board should ensure that the ICAAP does not become mere compliance activity only which senior management delegates to a lower level and it is carried out once or twice a year. Board and senior management must be clearly involved in the issue and push forward the process development and integrate it into the ongoing operations and planning

### **3.2 Sound Capital Assessment**

Sound Capital Assessment requires ICAAP design to be comprehensive and provide for identification, quantification and reporting of all the material risks faced by the bank. The bank should establish internal capital adequacy goals and have a process for internal control, review and audits. Another crucial component of an effective ICAAP is the assessment of capital. In order to be able to make a sound capital assessment the bank should, at minimum, have the following:

- Policies and procedures designed to ensure that the bank identifies, measures and reports all material risks;
- A process that relates capital to the level of risk;
- A process that states capital adequacy goals with respect to risk, taking account of the bank's strategic focus and business plan; and
- Processes of internal control reviews and audit to ensure the integrity of the overall management process.

### **3.3 Comprehensive assessment of risks**

Banks are required to identify and estimate all material risks faced by them in internal capital assessment process. Although it is difficult and may not be cost effective to capture complete risk universe yet a risk assessment system should be established to deal with all significant risks related to the bank. While Board and management formulate / approve policies, processes and procedures of every risk area; the business managers should be made accountable to identify the severity and impact of the risks involved in their operational activities.

- The most critical element of a sound risk management system is that management disseminates policies and procedures approved by the Board and ensures their implementation and compliance in true spirit.

- Bank should ensure continuous internal and external review of quantitative and qualitative risk measures to verify the relevance of risk management system to its business activities. Management should emphasize the significance and effectiveness of risk management practices to all internal stakeholders and it should be embedded in the culture of the institution.
- Banks should also assess the risks emanating from the intra-group exposures; these may include fund / non-fund based facilities and potential obligations to help sister concerns in financial crisis. Banks should take into consideration of possible adverse impacts of the relationships on the banks' financial stability and adopt remedial measures to contain contagion risk.
- ICAAP should be all encompassing process taking into account all those risk areas which are not reasonably addressed under Pillar 1 of Basel II, while evaluating credit, market, and operational risks; and all those risks factors which are not covered under Pillar-1 process. ICAAP should also capture the impact of external business and economic environment

### **3.4. Stress Testing**

The assessment of the effect that rare but extreme will have on the financial position, the profitability, liquidity and bank's available capital should be systematically assessed. Bank should be able to draw conclusions with respect to the adequacy of capital that it maintains and the coverage of not easily predictable risks and the effect of these risks on its risk structure. The detail of the assessment carried out depends on the complexity of the operations of bank. Scenario assessment such as the fall in the financial markets, a falling trend in the property prices, volatile liquidity condition, negative changes in macroeconomic factors etc., are of vital importance. This assessment forms a particularly important tool for the maintenance of satisfactory level of capital, so that all risks faced by each bank are sufficiently covered. Basically following elements need to be considered.

- Stress testing, sensitivity analysis and scenario analysis are proactive methods can be used within the ICAAP for evaluating the impact of various factors on the capital need of the bank.

- Bank must implement stress-testing procedures within the ICAAP, in order to evaluate in a predictable way the impact of negative changes in environmental factors on their risk profile and capital need.
- Stress testing aims at evaluating the impact of other factors besides normal or expected environmental risks, which may lead to serious under valuation of risks and capital need and also perform stress testing as regards material risks at least once every year.
- Stress testing should cover all material risks at least credit, liquidity, market, operation, interest rate risk of banking book and other bank specific risks as realized by the board and senior management of the bank. The Methods and outcome of stress testing must be fully documented. Management and board of bank must be informed about the outcome of stress testing.
- Stress testing scenarios must cover all risks identified by bank as material risks, and their potential synergy.
- It also must reflect exceptional but possible events and scenarios may be based on historical scenarios, though they must cover also hypothetical scenarios. The scenarios must take into account the impact of macroeconomic environment including the change of economic cycle stage. The stress testing scenarios must cover the probability and various levels of severity of changes in environmental factors and must evaluate the impact of strategic decisions.
- Bank must be able to explain to the NRB their reasons for the choice of stress testing scenarios.

The management of bank should duly assess the results, always taking into account the determined risk appetite of the bank and taking the necessary measures for encountering weaknesses that are identified the risk capacity limits, the development of Disaster Recovery Plans etc. For the effective stress-tests it is expected that the bank should adopt the relevant provisions of the NRB directives issued in connection with stress testing guidelines.

### **3.5 Monitoring and Reporting**

This involves establishing a formal monitoring and reporting mechanism which provides the senior management with the necessary information on the risk profile, trends and the

capital requirements. The bank should establish an adequate system for monitoring and reporting risk exposures and assessing how the bank's changing risk profile affects the need for capital. The bank's senior management or board of directors should, on a regular basis, receive reports on the bank's risk profile and capital needs. These reports should allow senior management to:

- Evaluate the level and trend of material risks and their effect on capital levels;
- Evaluate the sensitivity and reasonableness of key assumptions used in the capital assessment measurement system;
- Determine that the bank holds sufficient capital against the various risks and is in compliance with established capital adequacy goals; and
- Assess its future capital requirements based on the bank's reported risk profile and make necessary adjustments to the bank's strategic plan accordingly.

Banks should ensure that reports on material risks are frequently submitted to Board and senior management. The periodicity of risk reporting may vary according to the severity and type of risks. However, banks should generate such reports at least on quarterly basis for all material risks for review of the senior management.

### **3.6 Internal Control and Review**

This involves putting in place an appropriate mechanism of internal and external audits for ensuring the reasonableness of ICAAP and the accuracy of the data and stress scenarios used. The bank's internal control structure is essential to a sound capital assessment process. Effective control of the capital assessment process includes an independent review and, where appropriate, the involvement of internal or external audits. The bank's board of directors has a responsibility to ensure that management establishes a system for assessing the various risks, develops a system to relate risk to the bank's capital level, and establishes a method for monitoring compliance with internal policies. The board should regularly verify whether its system of internal controls is adequate to ensure well-ordered and prudent conduct of business. The bank should conduct periodic reviews of its risk management process to ensure its integrity, accuracy and reasonableness. Key areas that should be reviewed include:

- Appropriateness of the bank's capital assessment process given the nature, scope and Complexity of its activities;
- Identification of large exposures and risk concentrations;
- Accuracy and completeness of data inputs into the bank's assessment process;
- Reasonableness and validity of scenarios used in the assessment process; and
- Stress testing and analysis of assumptions and inputs.

#### **4. Internal Capital Adequacy Assessment Process : Principles**

The principles regarding Internal Capital Adequacy Assessment Process (ICAAP) of banks and financial institutions are;

##### **ICAAP 1: Every bank must have a process for assessing its capital adequacy relative to its risk profile**

Every bank must have an Internal Capital Adequacy Assessment Process (ICAAP) to assess and maintain on an ongoing basis the amounts, types and distribution of internal capital that they consider adequate to cover the nature and level of the risks to which they are or might be exposed. These strategies and processes shall be subject to regular internal review to ensure that they remain comprehensive and proportionate to the nature, scale and complexity of the activities of the bank.

##### **ICAAP 2: The ICAAP is the responsibility of the bank.**

Each bank is responsible for its ICAAP and for setting internal capital targets that are consistent with its risk profile and operating environment. At the same time, each bank should be able to demonstrate to its supervisory authorities that its ICAAP meets supervisory requirements.

##### **ICAAP 3: The ICAAP's design should be fully specified, the bank's capital policy should be fully documented and the management body (the Board of Directors and the senior management) should take responsibility for the ICAAP.**

The responsibility for initiating and designing the ICAAP rests with the Board of Directors and the senior management of the bank. The Board of Directors should approve the design of the ICAAP and the detailed implementation is the responsibility of the senior management. The management of the bank (the Board of Directors and the senior management) is also responsible for integrating capital planning and capital

management into the bank's overall risk management culture and approach. They should ensure that capital planning, management policies and procedures;

- were issued by the designated authority within the bank,
- are enforceable and
- are communicated and implemented

The bank's ICAAP should be formally documented. The Board of Directors should approve and review the ICAAP. The results of the ICAAP should be reported to the Board of Directors and the senior management of the bank.

**ICAAP 4: The ICAAP should form an integral part of the management process and decision making culture of the bank.**

The ICAAP should form an integral part of the bank's management processes so as to enable the management body of the bank, to assess, on an ongoing basis, the risks that are inherent in their activities and material to the bank. This could range from using the ICAAP to allocate capital to business units, to play a role in the individual credit decision process and in more general business decisions.

**ICAAP 5: The ICAAP should be reviewed regularly.**

The ICAAP should be reviewed by the bank as often as is deemed necessary to ensure that risks are covered adequately and that capital coverage reflects the actual risk profile of the bank. This review should take place at least annually. The ICAAP and its review process should be subject to independent assessment by the internal audit function. Any changes in the bank's strategic focus, business plan, operating environment or other factors that materially affect assumptions or methodologies used in the ICAAP should initiate appropriate adjustments to the ICAAP. New risks that occur in the business of the bank should be identified and incorporated into the ICAAP.

**ICAAP 6: The ICAAP should be based on the risks faced by the bank. The level of own funds should be adequate to the bank's risk profile and operating environment.**

*The adequacy of a bank's capital is a function of its risk profile.* Banks should set capital targets which are consistent with their risk profile and operating environment. Banks may take other considerations into account in deciding how much capital to hold. However, if other considerations are included in the process, the bank must be able to

show in its dialogue with supervisor, how these influenced its decisions concerning the amount of capital to hold. There are some types of risks for which the focus of the ICAAP should be more qualitative assessment. The bank should clearly establish for which risks a quantitative measure is warranted and for which risks a qualitative measure is the correct risk mitigation tool.

**ICAAP 7: The ICAAP should be comprehensive.**

The ICAAP should capture all the material risks to which the bank is exposed though there is no standard categorization of risk types and definition of materiality. The bank is free to use its own terminology and definitions, although it should be able to explain these in detail to the supervisor, including the methods used, the coverage of all material risks and how its approach relates to its obligations under Pillar 1. The ICAAP should cover:

- Pillar 1 risks, including major differences among the treatment of Pillar1 risks in the calculation of own funds requirements and their treatment under the ICAAP,
- Risks not fully captured under Pillar 1. Risks which fall into this category could include underestimation of credit risk using the SSA, underestimation of operational risk using the Basic Indicator Approach should be taken into account.
- Pillar 2 risks. The ICAAP should cover all material Pillar 2 risks to which the bank may be exposed, such as interest rate risk in the banking book, concentration risk, liquidity risk, reputation and strategic risks. Some of these risks are less likely to quantitative approaches, in which cases banks are expected to employ more qualitative methods of assessment and mitigation.
- Risk factors external to the bank. These include risks which may arise from the regulatory, economic or business environment and which are not included in the above mentioned risks.

**ICAAP 8: The ICAAP should be forward-looking.**

The ICAAP should take into account the bank's strategic plans and how they relate to macroeconomic factors. The bank should develop an internal strategy for maintaining capital levels which can incorporate factors such as loan growth expectations, future sources and uses of funds and dividend policy and any variation of Pillar 1 minimum own funds requirements. The bank should have an explicit, approved capital plan

which states the bank's objectives and the time horizon for achieving those objectives. The plan should also lay out how the bank will comply with capital requirements in the future, any relevant limits related to capital and a general contingency plan for dealing with unexpected events.

Banks should conduct appropriate stress tests which take into account, for example, the risks specific to the jurisdiction(s) in which they operate and the particular stage of the business cycle. Banks should analyze the impact that new legislation, the actions of competitors or other factors may have on their performance in order to determine what changes in the environment they could sustain.

**ICAAP 9: The ICAAP should be based on adequate measurement and assessment processes.**

Banks should have a documented process for assessing risks. This process may operate either at the level of the individual bank or at group level. The results and findings of the ICAAP should feed into a bank's evaluation of its strategy and risk appetite. Banks should not be required to use formal economic capital (or other) models though there is no single 'correct' process. Depending on proportionality considerations and the development of practices over time, banks may design their ICAAP in different ways. Non-quantifiable risks should be included if they are material, even if they can only be estimated. This requirement might be eased if the bank can demonstrate that it has an appropriate policy for mitigating/managing these risks.

**ICAAP 10: The ICAAP should produce a reasonable outcome.**

The ICAAP should produce a reasonable overall capital number and assessment. The bank should be able to explain to NRB about its ICAAP (which should cover all material risks) and its own funds requirements. Banks are encouraged in relation to their ICAAP, to make greater disclosures of information which is not proprietary or confidential.

**5. Principles of Proportionality and ICAAP**

- 5.1 Banks are required to have in place sound, effective and complete strategies and processes to assess and maintain on an ongoing basis the amounts, types and distribution of internal capital that they consider adequate to cover the nature and level of the risks to which they are or might be exposed. These strategies and processes

shall be subject to regular internal review to ensure that they remain comprehensive and proportionate to the nature, scale and complexity of the activities of the bank.

- 5.2 According to the principles, there is no single and universally accepted methodology for designing ICAAP. Each bank must consider its individual risk profile before designing its ICAAP. The risk profile is dependent on factors such as the size, the nature and the complexity of the operations of each bank. Furthermore, the adequacy of the internal governance procedures of bank should be considered. The principle of proportionality acknowledges the fact that significant differences may exist between the activities of different banks. Thus the risks emanating from their activities do not resemble. Consequently, smaller bank which conduct business activities of low complexity may, probably, be in a position to adequately manage the risks they assume by applying simple monitoring methods. The larger bank with complex business structures conducting complex, international business activities may probably need to apply more advanced methods in order to adequately monitor its risks. Hence, there is no unique, standardized format of ICAAP which will suit to all banks.
- 5.3 In this respect, each bank's responsibility to design its ICAAP in such a way so that all the risks that it assumes are identified and adequately monitored. Moreover, the ICAAP design should take into account the business plans of the Bank, its objectives regarding expansion and development of its activities, its future sources of finance etc. The ultimate choice of the specific methods and procedures that will be applied for the ICAAP implementation should be based upon the overall risk profile of the bank and more generally upon the environment in which it conducts its business. Banks are required to justify the appropriateness of the methods it chose.
- 5.4 It should be understood that the capital maintenance requirement is not the only measure that can be employed to mitigate the risks they are exposed to. Alternative ways of risk mitigation include the strengthening of their systems of internal control, the application of appropriate internal governance rules etc. In the cases where the quantification of risks is more difficult to perform or cannot be performed with sufficient accuracy, it is recognized that the qualitative measures that the bank must take in order to cover future unexpected losses, are very important.

5.5 Banks are free to develop a process according to their size, complexity and scale of their operational and business activities. Smaller banks with limited operations and less complex transactions might design their ICAAP using simple methodologies. The banks dealing in complex transactions and business activities would require more advanced techniques and methods to develop a comprehensive ICAAP.

## **6. ICAAP in Nepalese Banking**

- 6.1 Nepal Rastra bank has issued Risk Management Guidelines to the banks. The guidelines presented the internationally accepted principles on the various risks inherent in the banking business. The risk management guidelines have established minimum standard in general and banks should set their own risk management practice in particular keeping these principles in mind. Similarly New Capital Adequacy Framework 2007(updated July 2008) is under implementation, which provides the basis for assessment of risks, ensures the regulatory capital aligned with the risk profile of the bank. Banks are required to exercise the international best practices so as to ensure public interests are addressed in a safe and sound manner
- 6.2 In addition to the existing regulations, these guidelines seek to establish a framework for the SREP to make the banks more risk sensitive through formulation and implementation of ICAAP. Banks should define its ICAAP, implement it effectively and report to NRB ensuring that all the material risks are identified, measured, monitored and controlled.
- 6.3 Nepal Rastra Bank shall regularly review the process by which a bank assesses its capital adequacy, risk positions, resulting capital levels and quality of capital held by a bank. Supervisors shall also evaluate the degree to which a bank has in place a sound internal process to assess capital adequacy. The emphasis of the review shall be on the quality of the bank's risk management and control and may not result in supervisors functioning as bank management.
- 6.4 During the Supervisory Review and Evaluation Process, NRB shall consider the following components as important elements of the ICAAP;
- Bank's risk profile
  - Exposure to concentration risk and its management

- Exposure to interest rate risk in banking book and its management
- Liquidity risk and its management
- Other material risks which considered by the bank
- Other material risks which is not taken into consideration by the bank and considered as material risk by NRB
- Impact of the risk diversification
- Results of stress tests and its discussion among board and senior management
- Risk management process resulting from bank's activities including approach to risk identification, measurement, monitoring and control and mitigation tools
- Capital adequacy resulting from capital requirements in relation to risk resulting from bank's activities
- Market Discipline
- Any other matter considered important by the Risk Management Unit.

6.5 Nepal Rastra Bank has not prescribed any special methodology for designing ICAAP. Neither there is any universally accepted (One Size Fits All) process or methods for ICAAP. Banks should develop it considering the principles of proportionality. They should not solely rely on quantitative methods for the assessment of their capital adequacy. The quantitative methods need to be supplemented by sufficiently robust internal governance and internal control systems. Aforementioned principles on ICAAP should be incorporated and addressed through formulation and implementation of bank's own internal policy. It is the banks' responsibility to implement the best practices and to satisfy the supervisors on bank's overall risk management policy and practices by implementation of the policy.

## **7. Reporting Requirement**

The ICAAP serves as a basis for a dialogue between NRB and the bank within the framework of SREP. Banks are required to report the formulation and implementation of the ICAAP on an annual basis within one month of fiscal year end. Banks should report

if there are any changes made in the previous ICAAP or its outcome. At minimum, Bank's ICAAP report include following information:

- a. Executive summary;
- b. Background of the ICAAP process;
- c. Statement of bank's attitude to risk;
- d. Business strategy;
  - Risk strategy and risk appetite by risk types;
  - Target risk profile;
  - Actual risk profile and possible change in this profile;
- e. Capital Planning;
  - Business Plan and Capital Plan
  - Risk limits and use of these limits in capital allocation;
  - Summary of capital composition and capital planning;
  - Target capital adequacy;
- f. Risk Assessment;
  - Risk definitions;
  - List of identified risks;
  - Description of risk assessment methods by risks;
  - Risk assessment and capital need by risks;
  - Assessment for aggregated risks;
  - Description of risk aggregation methodology
- g. Stress and Scenario testing;
  - Description of methods
  - Results of stress testing,
  - Scenario analysis and Sensitivity analysis;
- h. Implementation of the ICAAP.
  - Comparison of ICAAP's outcome with the regulative capital requirements; justification of differences;
  - Internal control mechanisms applied in respect of ICAAP;

- Management decisions made on the basis of ICAAP;
- Results of an independent review of ICAAP;
- Planned changes in the ICAAP.
- Board and Senior Management discussion on ICAAP

## **8. Implementation provisions**

Banks are required to submit the first ICAAP Policy not later than end of Poush 2069. Thereafter Banks should report on annual basis incorporating new changes and development within one month of fiscal year end. The annex 1, 2 and 3 are the integral parts of this ICAAP guideline.

**ANNEX-1:**  
**Checklist for SREP**

Supervisor shall use this table to assess and analyze the bank's ICAAP in Supervisory Review and Evaluation Process

No.	Scope/Assessment Criteria	Yes	No	Remarks
<b>1</b>	<b>Business and Strategic Plan:</b>			
a	Contains a clear description of banks business, including the sources of revenue			
b	Explains how a bank plans to develop it business and the capital and liquidity implications of its strategy			
<b>2</b>	<b>Financial Plan :</b>			
a	Includes financial forecasts that demonstrate both capital adequacy and liquidity for at least a 3 year period based on the firm's business strategy			
b	Explains how profit distributions are made and the impact this may have on its capital position			
<b>3</b>	<b>Risk management framework:</b>			
a	Identifies all of the risks faced by the bank's business, considering external data and controls and whether they present a risk to capital			
b	Explains bank's attitude to manage all material risk			
<b>4</b>	<b>Stress and scenario Testing:</b>			
a	Identifies scenarios that could place bank's business under capital and liquidity stress and mitigating actions			
b	Stress test results are discussed on Board and Senior management level and reported to NRB Regularly			
c	Bank has developed its own shocks/scenario on the basis of inherent risk in addition to NRB Requirements			
<b>5</b>	<b>Regulatory capital :</b>			
a	Explains the amount of regulatory capital available to the business			
b	Explains the level of Pillar 1 regulatory capital required to meet NRB requirements			
c	Justifies the amount of additional 'Pillar 2' capital the bank requires			
<b>6</b>	<b>Liquidity :</b>			
<b>a</b>	Defines, or references, liquidity risks and planning arrangements			
<b>b</b>	Explains how the bank will obtain additional funding in the event of a liquidity crisis			
<b>7</b>	<b>Governance:</b>			
<b>a</b>	Explains how senior management uses the ICAAP in managing the business			

## **ANNEX-2:**

### **Checklist for Board and senior management of bank**

The questions mentioned below are to be discussed in the meeting of bank's board and senior management to assess their current ICAAP. Banks that have efficient ICAAP will answer "yes"; banks that answer "no" to any should investigate the areas to improve their process. These questions should be the part of discussion in the meeting of board and senior management. Each question should be discussed in detail and documented, which also can be demanded in the time of reviewing by the supervisor.

1. Have we succeeded in integrating the ICAAP into the bank's governance structure and organization, for example, by establishing a dedicated committee that meets regularly?
2. Is our senior management overseeing, setting, and monitoring risk appetite and strategy? Does the board have a comprehensive picture of all material risks?
3. Do we have a mechanism for defining our risk appetite that is closely related to the bank's business strategy?
4. Do we regularly reconcile capital and strategic planning and ensure consistency between business and risk management strategies?
5. Have we succeeded in translating the risk appetite into a comprehensive and workable limit system?
6. When defining the capital risk-bearing capacity, have we thought through both going-concern and gone-concern scenarios? How confident are we about meeting specific going-concern targets, such as profit levels and dividend payments?
7. Do macroeconomic simulation and stress tests play a sufficiently prominent role in the bank's ICCAP?

## **ANNEX-3 :**

### **Risk Guidance Note**

The full range of material risks faced by a bank will vary from one bank to another, dependent upon such factors as the customer base, operational complexity, market activities and outsourced functions etc. It remains a bank's responsibility to comprehensively identify measure, control and adequately mitigate all risks of significance that it faces and to maintain sufficient capital to reflect that overall risk position. In general, there are four categories of risks that should be considered in a bank's ICAAP:

- a) Risks covered by Pillar 1 capital requirements;
- b) Risks only partially covered by Pillar 1 capital requirements;
- c) Risks not covered by Pillar 1; and
- d) External factors.

Risks covered by Pillar 1 capital requirements	Credit risk Market risk Operational risk
Risks only partially covered by Pillar 1 capital requirements	Residual risk Counterparty credit risk Model risk Underestimation of credit, market or operational risk in Pillar 1
Risks not covered by Pillar 1	Strategic risk Concentration risk Liquidity risk Reputation risk Interest rate risk in the banking book Underwriting risk Pension risk Transfer risk Weaknesses in credit risk mitigation

Above list of risks is not definitive, bank must identify its key risks for itself. The bank needs to identify all of the risks to which they are exposed. This involves a wider spectrum of risks than those that form the basis for the capital adequacy calculation within Pillar 1, i.e. credit, market and operational risks.