NCC Bank
नेपाल क्रेडिट एण्ड कमर्स बैंक लि.
Nepal Credit & Commerce Bank Ltd.
Your Business Bank

Policy
of
Internal Capital Adequacy Assessment Process (ICAAP)
2018

Nepal Credit And Commerce Bank Ltd.

Bagbazar, Kathmandu

(Approved by Board of Directors Meeting No 670 Dated 7 Feb 2018

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1. Executive Summary

Internal Capital Adequacy Assessment Process (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. ICAAP is a comprehensive process which requires Board of Directors and Senior Management oversight; monitoring, reporting and internal control reviews at regular intervals for ensuring the alignment of regulatory capital requirement with the true risk profile of the Bank and thus ensures long term safety and soundness of the Bank.

Nepal Rastra Bank (NRB) has issued ICAAP Guidelines 2012 (updated on July 2013) requiring the policies, methodologies, techniques and procedures to assess capital adequacy requirements in the banks. Presently, bank has ICAAP- 2013 which has been due for review and also needed some of the latest updates for incorporating the various risk factors experienced during the period. In compliance with the regulatory requirements and for ensuring the bank's capital assessments, the ICAAP has been formulated and put into implementation upon the approval of Board of Directors (BoD) of the bank.

The ICAAP has been formulated incorporating the basic need as per regulatory and prudent norms for it as:

1. Guiding principles of ICAAP for assessment and controlling the capital measurement mechanism.
2. Definition and determination of risk strategies and setting up of the appetite level of various risk factors. A reporting format has been developed on determining capital consumption risk matrix.
3. It has incorporated the provisions to have business plan and capital plan of the bank with full consideration of capital position. Bank will have capital plan and liquidity plan at least of three years.
4. Methodologies and procedures of risk assessments have been prescribed so that the internal capital adequacy assessment would be smooth and reasonable.
5. Credit, Operation, Market, Liquidity, Reputation and other risks events are described with instances and indicators so that other events would be easily linked up with the particular risk.
6. Provision of calculating economic capital has been incorporated in the policy for adjusting the capital adequacy.
7. Methodologies and reporting guidelines for stress testing and shocks analysis have been specified for market shocks, credit shocks, exchange rate shocks and liquidity shocks.
8. Annual review regarding its effectiveness and completeness of measuring internal risk level and capital requirements.

9. Finance department shall execute the operation part especially on capital adequacy and stress testing calculation. Internal audit department and Compliance department shall review the implementation status and its effectiveness. The policy shall be reviewed on annual basis.

NRB puts as scheduled plan for monitoring the banks' capital position, capital management and strength of the capital as the key factor of its regulatory supervision. While referring the latest supervision report published on April 2017 by NRB, some common issues are outlined as below in regard to the ICAAP implementation.

1. Bank's ICAAP Guideline does not prescribe need for periodic assessment for future capital requirement and the capital charge for the risks outlined.
2. ICAAP are not adequate and commensurate with the size of the bank. Because of the lack of strategic plan, ICAAP of most of the banks lack strategic orientation.
3. Considering the human resources and other factors, weak infrastructure was noted to implement ICCAP.
4. ICAAP has not been annually reviewed by the senior management, risk management committee and the board.
5. No discussion is held regarding the contingency plan on the deficit capital resulting during the stress testing in the bank.

Bank understands and accepts that the effective capital management always makes sure the healthy financial position and performance of the bank. It ensures the healthy and competitiveness with safe and sound recognition in the industry. Board takes the documents with the high importance and keeps on close monitoring for the capital assessment and management.

2. Background

The Policy sets out the scope of designing and use of the Internal Capital Adequacy Assessment Process (ICAAP) of Nepal Credit & Commerce (NCC) Bank. Capital adequacy Framework 2015 issued by Nepal Rastra Bank (NRB) has required to formulate individual bank's ICAAP and setting capital targets commensurate with Bank's risk profiles and management control environment. These strategies and procedures shall be under regular monitoring in regard to internal capital assessment and regulatory requirements. ICAAP helps on determining the economic capital required to cover all risks being inherent in the Bank.

NCC Bank has its plan, policies, manual and working methodology in place to manage all kinds of risks inherent in the banking business. To manage various banking risks, the Bank has established different control mechanisms incorporating the robust internal control system, segregation of duties amongst the staffs, formation of committee of director and management level for different functions, appropriate delegation of authorities to the committees and an independent risk management department. Apart from that, the bank has strong reporting system to minimize the banking risks. As a part of ICAAP implementation, NCC Bank has been reporting by submission of various reports to the BoD and board level Risk Management Committee (RMC) regularly.

The objective of capital adequacy framework is to develop safe and sound financial system and position by way of sufficient amount of qualitative capital and risk management practices. This document has intended to ensure that the bank maintains appropriate level of capital which:

- Is adequate to protect its depositors and creditors
- Is commensurate with risk associated activities and profile of the bank
- Promotes public confidence in the bank

Understanding the need, importance and regulatory compliance, the ICAAP Policy- 2018 has been formulated and shall be put into implementation with the true spirit of protecting the bank's financial health and stakeholders' interest with the approval of BoD.

3. Guiding Principles

The policy has been formulated on the ground of basic principles which are the benchmark that bank takes on capital planning, management and risk assessments. Bank believes that the branch and market reputation is build up by the financial health and prudent banking which is started from the capital management and strong capital base. The ICAAP has been formulated with the strong fundamentals and beliefs on capital with the basic principles as follows.

3.1 Assess Capital Relative to Risk Profile

Bank shall have in place ICAAP to assess and maintain on an ongoing basis the amounts, types and distribution of internal capital. Risk profile shall always be focused on lower side by acquiring the exposures having low risk. While taking any kind of risk, return factor on capital employed will always be considered.

3.2 Bank's Responsibility

Internal capital adequacy assessment and setting internal capital targets consistent with risk profile and operational concerns is the key responsibility of the bank. Bank shall not be comfortable to run even a single day without adequate capital.

3.3 Fully Specified, Fully Documented and Responsibilities

ICAAP guidelines issued by NRB have specified to be the responsibility of senior management for initiating and designing ICAAP. Board approves the design of ICAAP and its implementation is the responsibility of the senior management. The management of the bank (the Board of Directors and senior management both) is responsible for integrating capital planning and capital management to bank's overall risk management culture and attitude.

3.4 Integral Part of Management Process and Decision Making Culture

ICAAP is the integral part of management processes to assess the risks inherent in the activities of 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. Everyone within the bank is to be concerned on the capital charge on every activity attracting the risk exposures to the bank.

3.5 Regular Review

The policy shall be reviewed as often as is deemed necessary to ensure that risks are covered adequately and the capital coverage reflects the actual risk profile of the bank. This review shall take place at least annually. ICAAP and its review process should be subject to independent assessment by the internal audit function.

3.6 Own Fund for Risk Profile and Operating Environment

Capital targets would be in consistent with the bank's risk profile and operating environment. Bank shall develop the quantitative and qualitative measures as risk mitigation tool of the bank.

3.7 Forward Looking

ICAAP considers the impact on capital levels on loan growth expectations, future sources and uses of funds, dividend policy and any variation of Pillar 1, minimum own funds requirements. It also assesses the general contingency plan for dealing with unexpected future events/losses.

3.8 Adequate Measurement and Assessment Processes

The results and findings of the ICAAP shall be presented for evaluation of its strategy and risk appetite. Depending on proportionality considerations and the development of practices over time, bank may design the ICAAP in different ways.

3.9 Produce Reasonable Outcome

Result produced from ICAAP would be reasonable and justifiable to the risk exposures inherent in the bank. If any discrepancies or inconsistency are observed on the result than projection, the ICAAP need to be reviewed immediately and may need changes based upon the actuality and prevailing conditions.

4. Core Focus Area and Need of the ICAAP

The major focus of the ICAAP is to analyze the existing and probable future needs of the capital in the bank. It is the document for maintaining capital adequacy for the bank.

It also covers the area of shareholder returns, avoidance of regulatory intervention, protection against uncertain events, depositor protection, working capital, capital held for strategic acquisitions, etc. ICAAP takes into account the supervisory powers that might be applied in a bank in case of failure to follow the regulatory requirements. All the hidden risks that are ignored at the time of calculation of Capital Adequacy Ratio (CAR) as per the Simplified Standardized approach needs to be identified and properly accounted for along with the internal capital assessment and measurement.

5. Bank's Objectives, Business Strategies and Risk Strategies

The objective of NCC Bank is to be one of the reputed and trustworthy bank in the industry with the higher level of satisfaction of all stakeholders as well as to be known as customer centric bank. Bank's efforts would be to increase the shareholders fund by considering the risk factors and maintaining the risk within the tolerable limit.

NCC Bank will set the business strategy annually taking due consideration of the current financial position of the bank, including the strategic position, balance sheet strength, future profitability and long term objective. The business strategy which will be developed shall properly align risks, capital adequacy and performance targets so that statutory compliance and desired level of performance is duly met. The setting of the business strategy thus ensures that risk and capital requirement is proactively managed to the level desired by the Management, Board of Directors and Shareholders and is congruent with overall long term business strategy of the bank.

Risk Strategies:

- Controlled and balanced performance across business units;
- Positive development of earnings quality;
- Compliance with regulatory capital requirements;
- Maintaining Capital Adequacy all the time;
- Diversified, Stable & Safe Funding;
- Highest level of compliance and reputation risk management through product and good corporate governance;
- Strategic Liquidity allowing for business planning within the liquidity risk tolerance and regulatory requirements.

Business strategy set out by the Bank mainly includes the Risk & Capital Plan and risk appetite, which allows the bank to:

- Set capital adequacy goals with respect to risk, considering our strategic focus and business plans,
- Assess the risk-bearing capacity with regard to internal and external requirements (i.e. regulatory and economic capital), and
- Apply stress testing to assess the impact on the capital demand, capital base and liquidity position.

5.1 Risk Strategy and Risk Appetite

Bank takes risk on controlled and calculative approach. Potential risks that can materially impact the business operation and reputation shall never be encouraged irrespective of returns. Risk appetite shall be maintained at low level so that tolerance level would remain within controllable position. Bank shall maintain always 0.5% buffer capital to absorb the shocks of unwanted risk on credit, operations or market. Bank always stays at conservative position considering the market fluctuation, instability and political uncertainty in the country.

Risk level shall be defined form the Credit Risk Exposures, Operation Risk Exposures, Market Risk Exposures and Supervisory Adjustments based upon the available total capital fund. Bank shall maintain the individual risk exposure within the limit set as the appetite level of the bank.

5.2 Risk Management Structure and Procedures

Different Risk Management Committees/functions for Credit, Operation and Market shall look after the issues of risk under respective areas.

Issues and resolutions made on risk management committee/functions with due approval shall further be put on board level Risk Management Committee for review. With endorsement or conclusions over the committee report, a report shall be further submitted to board for review and needful action.

5.3 Risk Assessment & Adjustment

Various risks associated with the banking business shall minutely be studied and assessed its impact on the capital. Events being faced in the business course shall be measured with its specified type and shall be reviewed on respective risk management committees/functions. Risk impact shall be measured on quantitative manner to the best possible and shall be adjusted on capital fund and risk weighted exposure while calculating the capital adequacy ratio.

Concerned risk management department like: Credit Risk Management Department, Market & Liquidity Risk Management Department, Operation Risk Management Department shall individually measure and calculate the loss events and recommend adjusting on capital if required in consultation with Chief Risk Officer and Chief Executive Officer.

5.4 Economic Capital & Risk Adjustments

Based upon the risk identification and assessment by various risk committees, risk shall be aggregated with credit risk, market risk and operation risk. If any other risks identified, that also shall be considered on aggregate risk.

Based upon the risk data, if the risk has already been covered by Pillar I and Pillar II under Basel III requirements, there will be no need for capital charge or economic capital adjustments. If **Pillar I** and **Pillar II** have not addressed the risk, then bank shall quantify the risk events converted to potential loss events and adjust on total risk exposures. Management decides the cases and values to be adjusted as risk exposures or capital erosion that shall be encouraged for good risk management in the bank.

Examples of capital or risk adjustments needs:

- Legal cases against the bank that may cause credit, operation and market risk
- NRB's non compliance issues raised by auditor, regulators or internal mechanisms
- Operational risk events and operational loss events
- Earning volatility
- Stress testing measures/impact near to reality
- Fixed assets variances on book record and physical status
- Cases under investigations
- Long term and disputed receivables
- Long pending financials recording which may have impact on capital requirements or risk exposures of the bank

5.5 Risk Aggregation Methodology

Once the risks have been identified and quantified, individual risks also have to be aggregated to determine the bank's overall risk in the ICAAP. NCC Bank has adopted the Capital Adequacy Ratio calculation as per Capital Adequacy Framework issued by Nepal Rastra Bank as risk aggregation methodology. Under Pillar 1 of the Capital Adequacy Framework, bank's overall minimum capital requirement is calculated as the sum of capital requirements for the credit risk, operational risk and market risk. Since, the minimum capital requirement as prescribed by Nepal Rastra Bank is mandatory, risk calculated as ICAAP either determine no additional capital is needed, or additional capital is required above Pillar 1 levels. Other risk such as compliance risk, reputation risk, technological risk etc not included under CAR Framework are internally identified, assessed and mitigated by the management.

6. Classification and Identification of Risks

Bank shall collect and record the risk assessment and risk events occurring in the day to day functions. The type and scope of risk events would be as determined and decided by risk functions, management and risk management committee time to time. CRO closely monitor the risk events and risk indicators that have to be considered for capital planning and have probable future impact.

6.1 Credit Risk

Credit risk is the chances for loss due to failure of borrower to meet its contractual obligation to repay debt in accordance with the agreed terms. Commonly, it is also referred to as default risk. Credit risk is predictable to the extent possible. Lots of measures are to be applied for mitigating credit risk. Credit Policy Guide, Internal Credit Rating, Credit Risk Management Policy, NRB Directives and Circulars guide for identifying, measuring and mitigating the credit risk. Following measures are applied for credit risk assessments which are inclusive.

6.1.1 Credit Risks Categories

Credit Risk shall be segregated to subcategories for micro level risk measurement and control. Primary and mandatory segregation would be based upon the categories given on Basel III framework as below:

a) Claims on Government & Central Bank
b) Claims on Other Official Entities
c) Claims on Banks
d) Claims on Corporate & Securities Firms
e) Claims on Regulatory Retail Portfolios
f) Claims secured by Residential Properties
g) Claims secured by Commercial Real Estate
h) Past due Claims
i) High Risk Claims
j) Other Assets
k) Off Balance Sheet Items

In addition to above, credit risk management department/unit may develop the procedure of recording specific credit risk events, review & report of such events and basis of credit risk quantification for the reporting under ICAAP. Credit risk management may determine the specific risk level on each category on credit/loan portfolios time to time for maximizing profit at low level of risk. Accordingly, finance department works all the time for managing assets side of balance sheet to minimize the risk exposures except the risk assets. Credit risk management may be as defined by the management time to time through circulars, polices or manuals.

6.1.2 Credit Concentrations

Credit risk management (CRM) reviews the credit concentration on periodical basis under regulatory requirements and bank's internal policies. If felt necessary, CRM may fix the tolerance level of credit concentrations and basic of quantifying credit risk for beyond the tolerance level. Such identified risk shall be adjusted on the economic capital calculation. Credit concentration risk arises on:

- Single Counterparty, Group Exposures
- Industry or Economic Sectors
- Geographical Regions
- Particular Income Group
- Margin Lending
- Real Estate
- Concentration Stress
- Collateral Concentrations
- Top 1, Top 5, Top 10, Top 20, Top 50 Concentration, and many more as deemed necessary.

6.1.3 Estimating Credit Losses:

Periodical credit loss assessment shall be done based upon the prevailing credit portfolios and credit performance. Following tools are used for credit loss estimation.

A. **Probability of Default (PD):** The likelihood that the borrower fails to make full and timely repayment of its financial obligations

B. **Exposure At Default (EAD):** The expected value of the loan at the time of default.

C. **Loss Given Default (LGD):** The amount of the loss if there is a default, expressed as a percentage of the EAD

D. **Recovery Rate (RR):** The proportion of the EAD the bank recovers

6.1.4 Credit Risk Events:

Risk events on credit administration and management shall be identified recorded and put the effects on the capital. Following are the instances of credit risk events.

- Bankruptcy,
- Failure to pay dues,
- Loan restructuring,
- Loan moratorium changes,
- Slow down on business transactions,
- Customer not in contact,
- Frequent shifting of business site,
- Deteriorated collateral value,
- Deteriorated economic situation,
- Tax evasion and unfavorable news,
- Frequent breach of credit norms/agreements,
- Frequent movements on credit ratings,
- Unacceptable or susceptible credit information,
- Unsupportive credit customers,
- Frequent cheque bounce
- Frequent drawing power deficit
- Deteriorating financial performance
- Adverse media news
- Frequent insurance expiry
- Casualness on responding to bank
- Deteriorating related sector
- Adverse impact of government policy
- etc…

These are the few cases of events that cause or indicate the credit risk. Bank shall have practice of collecting such types of events and assess the credit risk through respective risk department, risk committees and board.

6.1.5 Conduct to Mitigate Risks

a. Charging higher interest rate to borrowers who are more likely to default, a practice called risk-based pricing.

b. Including covenants
   i. Periodically report its Financial Condition.
   ii. Refrain from paying dividends, repurchasing shares, borrowing further, or other specific, voluntary actions that negatively affect the company's financial position.
   iii. Repay the loan in full, at the lender's request, in certain events such as changes in the borrower's debt-to-equity ratio or interest coverage ratio.

c. Insurance

d. Reduce the risk by diversifying the borrower's pool.

e. Securitization of loans

f. Regular review of the credit portfolio by the senior Management with periodic reporting to the Board of Directors.

g. Separate independent audit and inspection of borrowers by internal auditors in addition to audit and inspection by statutory auditors.

h. Strict adherence to the prudential guidelines of the Central Bank on Loan Classification, Interest Recognition, Asset Classification, Single Obligor Limit, Sectoral Exposure etc.

i. Establishing suitable exposure limits for borrowers and sectors and monitoring the limits on a regular basis.

j. Risk mitigation steps with a special emphasis on collateral.

k. Setting counterparty limits based on their financial strength.

l. Training of lending and legal officers on documentation and professional valuations. Developing skills and expertise of lending officers to scientifically assess project viability and customer integrity.

m. Educating the staff on provisions in the Banks and Financial Institution Act and other relevant statues and the regulatory guidelines of the Central Bank.

n. Seeking external legal opinion and advice.

o. Identifying Early Warning Signals (EWS) and taking prompt action thereon.

p. Constant posts sanction monitoring with special independent team for verification of current assets.

6.2 Operation Risk

Operational risks are risk of loss resulting from inadequate internal factors like process, people and systems and/or from external factors. Operational risks are highly important as it entails cent percent loss to the bank in the event of is occurrence. The major contributor of the Operation Risk is qualitative and is difficult to be quantified. The Bank has been following the process specified under Capital Adequacy Framework for calculation of Operational risk of the Bank. Operational risks are assessed employing the Basic Indicators Approach as set out by Capital Adequacy Framework issued by Nepal Rastra Bank.

In order to determining operation risk exposures, three years average revenue shall be taken as key determinants based on the Basel III requirements. In additional to this, Operation Risk Management (ORM) may develop time to time the procedure of recording specific operation risk event, review & report of such event and basis of operation risk quantification. ORM shall consider technological risk, compliance risk, operational activities/events risks and corporate reputational risks for the assessment of risks under ICAAP.

6.2.1 Policy

Bank shall have Operation Risk Management Policy fully equipped with mechanism of identifying and controlling the operational lapses and risk arises by the events. In general, following measures shall be applied:

- Listing the activities, products and procedures susceptible to operational risk.
- Development of culture of self assessment and examination of operational risks.
- Risk Mapping with the return and appetite on regular basis.
- Preparation of Key Risk Indicators (KRI) and discussion on the risk committee the issues reported as KRI.
- Developing the Early Warning Signals (EWS) for risk identification and control.
- Monitoring and implementing the audit findings, compliance issues on periodical basis.
- Prepare the database of losses occurred on operational matters.
- Actual loss data is compared to the captured loss events and evaluate its frequency and severity.
- Events classification as High Frequency High Severity (HFHS), Low Frequency High Severity (LFHS), High Frequency Low Severity (HFLS) and Low Frequency Low Severity (LFLS).
- Periodical cross checking of the operational activities and events offsite and onsite and record the deviations if fund in procedures.
- Others as determined by ORM on day to day working and review

6.2.2 Risk Classifications

Operation risks are classified in different categories based upon their nature and impact to the bank. Considering the risk impact and severity, bank takes appropriate risk management strategies and gives the impact on the capital assessment.

In general, operation risk events would be reviewed and assessed under the following segments:

- Internal Fraud
- External fraud

- Employees and workplace safety
- Damage to physical assets
- Business disruption and system failures
- Execution, delivery and process management

Assessment of operational risk events and impact analysis shall be determined based upon the following factors:

- Total number of risk events
- Total number of loss events
- Total financial reversals
- Net financial impact
- Exposure based on expected increase in volumes
- Total numbers of customers' claims shout out/solved
- Staffs capabilities/in-capabilities indexes
- Non compliance of standard operating procedures
- IT index

In general, the causes of operation risk would be by following:

- Inadequate segregation/assignments of duties
- Lack of training and development program
- Lack of proper and effective supervision
- Inadequate auditing procedures
- Inadequate security measures
- Lack of market updates
- Poor system design
- Lack of understanding of cause and impact
- Poor HR policies and practices etc…

Bank shall clearly identify the causes of each risk events for future precautions. There shall be a practice of recording risk and loss events related with operation risk and it shall be reported to Operational Risk Management Committee. Operation risk management committee further reports to board level risk management committee.

6.3 Market Risks

Market risk is the potential loss due to changes in market prices or values. Market risk basically arises on interest rates changes, stock market, currency market and commodity market. Key components of market risk are interest rate risk, currency risk and price risk. Market risk governance structure in the bank would be the ALCO and board level risk management committee. ALCO meeting discuss the issues related with market risk and the risk identification and assessment finding shall be put further on board level risk management committee. Basically, following measures shall be applied on controlling market risk in the bank,

- Interest rate risk, liquidity risk and equity risk
- GAP analysis, deposit mix, interest rate risk, portfolio mix
- Setting the risk appetite and deriving the limit structure
- Limit monitoring and treatment of limit breaches
- Data management/analysis continuously
- Pricing models and valuations
- Simulations, risk aggregation and risk decomposition
- Risk reporting

6.3.1 Interest Rate Risk

Interest rate risk is the risk on earnings from movement of interest rates. It arises from differences between the timing of rate changes and the timing of cash flows. The evaluation of interest rate risk must consider the impact on liquidity, revenue, future business, products and other related incomes. Changes on interest rates affects the bank's net interest income, market value of trading accounts (and other instruments accounted for by market value), and other interest sensitive income and expenses. The key measure for interest rate sensitivity is the gap analysis

6.3.2 Liquidity Risk

Liquidity Risk is a risk that the bank will not be able to meet its financial obligations resulting in substantial financial and reputation loss. Such risk arises from situations such as (1) shortage of cash and cash equivalents to meet the needs of depositors, creditors and lenders; and (2) sale of assets at a loss or lack of marketability of existing assets of the bank.

A periodic report on liquidity profile and liquidity shocks analysis would be the key measures for controlling and identifying the liquidity risk. Treasury department prepares and discusses the liquidity profile at ALCO meeting. Some of the key measures for liquidity would be as below:

- CD ratio
- Liquid assets to total deposit ratio
- Liquid Assets to total assets ratio
- Deposit concentration
- Deposit mix of saving, fixed, call and current

Followings would be taken as warning signals for liquidity risk measurement precautions:

- Rapid growth on risk assets and fixed assets
- Growing concentrations in assets and liabilities
- Increases in currency mismatch
- Repeated incidents of breaching internal or regulatory limits
- Negative trends or heightened risks associated with a particular product line
- Significant deterioration in earnings, asset quality and overall financial condition
- Negative productivity
- Stock price declines or rising debt costs
- Increasing retail deposit outflows
- Difficulty on placing short term liabilities

6.4 Reputation Risks

Reputation risk refers to the potential for loss of value resulting from any reputation damaging incident. Reputation risk is an important and most vulnerable factor on banking industry. The major impact of reputation risk event is on the confidence of stakeholders to the bank. The major stakeholders are Regulators, Shareholders, Depositors, Loan Customers, Service Customers, Government etc.

It is much difficult to measure reputation loss. As reputation is linked with trust of stakeholders, reputation risk can be measured with the erosion in trust which can be classified under five levels:

Level	Stakeholder Reaction	Trust Damage	Risk Events (Examples)
1	Disappointment	Trust Questioned but recoverable quickly	Inconsistent Behavior (gap between policy & reality)
2	Surprise	Trust hurt Recoverable with time & good PR	Persistent delays in performance
3	Concern	Trust Diminished Recoverable at considerable cost	Negative news in the market

Level	Stakeholder Reaction	Trust Damage	Risk Events (Examples)
4	Disgust	Trust Severely Damaged Never fully recoverable	Financial crisis; delays in meeting withdrawal demands
5	Outrage	Trust Completely Lost Not recoverable	Serious liquidity problems

Risk events of Level 1 and 2 are common whereas level 3, 4 and 5 are rare but not impossible. Bank should keep a record of risk events related to reputation risk. While it is very difficult to measure the quantitative impact of these events, bank shall take it under consideration while calculating overall risk.

6.5 Compliance Risk

Compliance Risk is the risk resulting from non-compliance with laws and regulations and lack of adequate documentation to demonstrate compliance and risk from failure to comply with financial reporting standards, agreements or regulatory requirements. Compliance Risk components are generally referred to as regulatory, financial reporting and legal risk. Bank constantly monitors and mitigates compliance risk through the adoption of appropriate policies and timely reporting as per the regulatory requirements. A separate compliance department works with independency and professionally for monitoring and reporting the compliance status on banking activities.

6.6 Other Risks

Bank identifies, assesses and monitors other risks such as technological risks and strategic risks at regular interval in addition to the above mentioned risks. Bank should regularly discuss various other prominent risks that it faces or likely to face in the execution of its day to day activity and address them appropriately.

7. Capital Planning

7.1 Business Plan and Capital Plan

While preparing annual budget, capital assessment and planning would be the key factors for justifying the budget of different years. Budgeting shall be done based upon the capital available and future capital creation through the budgetary planning. Budget should be prepared with best support of capital plan at least of three years. Basic fundaments for capital planning process would be:

- Internal Control and Governance

- Capital Policy and Risk Capture
- Forward Looking
- Management Framework for preserving capital

To make the business plan effective, it would be concentrated and commensurate with the level of resent risk structure and bank's risk appetite level. Capital planning is undertaken to answer a simple question 'Will the Bank have enough capital tomorrow in a changed business platform?' Following factors shall be taken into consideration while developing an effective capital plan:

- Minimum requirements of capital as per Nepal Rastra Bank
- Growth of business and exposed risks
- Dividend policy
- Rescheduling debts repayments
- Types of capital instruments like: equity, preference shares, debentures etc
- Various stress scenarios
- Disposing of assets
- Others, as considered necessary by the bank

Business and capital plan will be implemented after the approval of Board of Directors. Board shall be ultimately responsible for ensuring the intact capital planning, execution and maintenance.

Bank shall have a financial/capital plan of at least Three Years equipped with the liquidity planning and capital planning. The plan specifies the profit distribution modality and impact on the capital position. This is the basic mandatory requirements of this ICAAP to prepare and review on periodical way.

7.2 Capital Composition

The composition of Common Equity, Tier-I and Tier-II capital would be as below based on the framework issued by NRB. It may differ based on new NRB circulars and bank's internal decision.

Bank puts its best efforts not to erode its Core Capital. Components to be deducted from core capital will be maintained at zero level with best practices of good governance and zero level of non compliances.

Capital Adequacy Table (Summary)

Particulars	Current Period	Previous Period
Common Equity Tier 1 Capital	*******	*******

Tier 1 Capital	*******	*******
Tier 2 Capital	*******	*******
Total Capital	*******	*******
Risk Weighted Exposures	*******	*******

Regulatory Ratios			
a	Leverage Ratio (Regulatory Requirement >= 4%)	******	*******
b	Common Equity Tier 1 to Risk Weighted Exposure Ratios	*******	*******
c	Tier 1 to Risk Weighted Exposure Ratios	*******	*******
d	Total Capital to Risk Weighted Exposure Ratio	*******	*******

Capital Adequacy Table

1. 1 RISK WEIGHTED EXPOSURES		**Current Period**	**Previous Period**
a	Risk Weighted Exposure for Credit Risk	*******	*******
b	Risk Weighted Exposure for Operational Risk	*******	*******
c	Risk Weighted Exposure for Market Risk	*******	*******
Total Risk Weighted Exposures (Before adjustments of Pillar II)		*******	*******
Adjustments under Pillar II		******	*******
Add .....% of the total deposit due to insufficient Liquid Assets If desired level of disclosure requirement has not been achieved, Add .....% of RWE Other adjustments………………….		*******	*******
Total Risk Weighted Exposures (After Bank's adjustments of Pillar II)		*******	*******

1.2 CAPITAL		**Current Period**	**Previous Period**
	Tier 1 Capital [Core Capital (CET 1 + AT 1)]		
	Common Equity Tier 1 (CET 1)		
a	Paid up Equity Share Capital	*******	*******
b	Equity Share Premium	*******	*******
c	Proposed Bonus Equity Shares	*******	*******
d	Statutory General Reserves	*******	*******
e	Retained Earnings	*******	*******
f	Unaudited current year cumulative profit/(loss)	*******	*******
g	Capital Redemption Reserve	*******	*******
h	Capital Adjustment Reserve	*******	*******
i	Dividend Equalization Reserves	*******	*******
j	Other Free Reserve	*******	*******
k	Less: Goodwill	*******	*******
l	Less: Intangible Assets	*******	*******
m	Less: Deferred Tax Assets	*******	*******
n	Less: Fictitious Assets	*******	*******
o	Less: Investment in equity in licensed Financial Institutions	*******	*******
p	Less: Investment in equity of institutions with financial interests	*******	*******

q	Less: Investment in equity of institutions in excess of limits	*******	*******
r	Less: Investments arising out of underwriting commitments	*******	*******
s	Less: Reciprocal crossholdings	*******	*******
t	Less: Purchase of land & building in excess of limit and unutilized	*******	*******
u	Less: Cash Flow Hedge	*******	*******
v	Less: Defined Benefits Pension Assets	*******	*******
w	Less: Unrecognized Defined Benefit Pension Liabilities	*******	*******
x	Less: Other Deductions	*******	*******
Adjustments under Pillar II			
Less: Shortfall in Provision		*******	*******
Less: Loans & Facilities extended to related parties and restricted lending		*******	*******
Additional Tier 1 (AT 1)			
a	Perpetual Non Cumulative Preference Share Capital	*******	*******
b	Perpetual Debt Instruments	*******	*******
c	Stock Premium	*******	*******

Supplementary Capital (Tier 2)	Current Period	Previous Period
Cumulative and/or Redeemable Preference Share	*******	*******
Subordinated Term Debt	*******	*******
Hybrid Capital Instruments	*******	*******
Stock Premium	*******	*******
General Loan Loss Provision	*******	*******
Exchange Equalization Reserve	*******	*******
Investment Adjustment Reserve	*******	*******
Assets Revaluation Reserve	*******	*******
Other Reserves	*******	*******
Total Capital Fund (Tier I and Tier II)	*******	*******

1.3 CAPITAL ADEQUACY RATIOS	Current Period	Previous Period
Common Equity Tier 1 Capital to Total Risk Weighted Exposures (After Bank's adjustments of Pillar II)	*******	*******
Tier 1 Capital to Total Risk Weighted Exposures(After Bank's adjustments of Pillar II)	*******	*******
Tier 1 and Tier 2 Capital to Total Risk Weighted Exposures(After Bank's adjustments of Pillar II)	*******	*******

7.3 Targeted Capital Adequacy

Capital adequacy shall be maintained with the optimum tradeoff of risk and return. Basic line of adequacy will be as per the regulatory requirements and buffer capital shall be maintained based upon the management decisions time to time considering the prevailing business position. Bank's effort would be to maintain at least 0.5% buffer capital on regulatory capital adequacy.

7.4 Treatment of Deficit Capital

Deficit on the capital is extremely serious and shall be reported to CEO, Risk Management Committee and the Board immediately. Finance department shall prepare a comprehensive Capital Plan to meet the Gap between the demand and supply of the capital in the aforesaid period in consultation with the CEO and present to the Risk Management Committee for its review and appropriate recommendation to the board. The capital plan approved by the board shall be implemented within the time frame stipulated in the capital plan.

Such capital plan may consist of capitalization initiatives as follows:

a) Issuance of Tire II Capital
b) Issuance of right share/bonus share
c) Restructuring of its assets and liabilities based on the risk weightage
d) Reducing the risk assets
e) Divestments
f) Merger/acquisitions
g) Triggering of contingent capital sources

In addition, capital plan may also contain the following:

a) **Risk Avoidance**: In lending operation, for example, the bank might consistently reject credit exposures with poor creditworthiness on the basis of required risk/return ratios or by defining risk sensitive business focuses (products, markets, industries, etc)
b) **Risk Mitigation/Limitation**: In particular, demand collateral and/or apply CRM techniques and adhere to the defined credit risk limits as derived its risk
c) **Risk Diversification**: By diversifying its portfolios, bank may hedge its dependence on specific developments and thus reduce its risks.
d) **Risk Transfer:** In case of credit risk, for example, the bank may use guarantee, insurance and credit derivatives and/or securitize its own exposures.

8. Stress and Scenario Testing

Stress and scenario testing is a risk management technique used to evaluate the potential effects on the institution's financial condition within the set of specified changes in risk factors corresponding to exceptional and plausible events. Under the ICAAP, bank shall examine future capital resources and capital requirements under various scenarios and shocks. It is forward looking approach for evaluating the adequacy of the bank's capital.

Bank conducts quarterly stress testing for identified risks. Results of the tests shall be reflected in the bank's existing and future capital; liquidity; profitability and other indicators. Bank's capital plan depends on the result of stress testing. Bank shall conduct stress testing on Credit Risk, Operation Risk and Market Risk.

The testing scope is prepared with simple sensitivity testing in various areas of risk management. The selected sample shocks provide the minimum standards for stress testing. Gradually the level of testing and shocks level shall be improved.

8.1 Methodologies and Scenario Selection

Stress tests shall cover a range of risks and business areas. Bank shall integrate effectively across the range of its stress testing activities to bring a complete picture. Stress testing shall cover various ranges of scenarios with forward looking approach. Stress tests shall be made on the events that are vulnerable of creating most damage whether through size of loss or through loss of reputation.
Stress testing shall determine what scenarios could challenge the viability of the bank (reverse stress tests) and thereby uncover hidden risks and interactions among risks. As part of an overall stress testing program, bank shall aim to take account of simultaneous pressures in funding and asset markets and the impact of a reduction in market liquidity.

8.2 Stress Scenario Selection

8.2.1 Credit Shocks

15% of performing loans deteriorated to substandard.

15% of substandard loans deteriorated to doubtful loans.

25% of Doubtful loans deteriorated to loss loans.

5% of performing loan deteriorated to loss loan.

All NPL under substandard downgraded doubtful.

All NPL under doubtful downgraded to loss.

25% of performing Real Estate loan downgraded to substandard.

25% performing Real Estate loan directly downgraded to Loss

2 Large exposures downgraded: Performing to Substandard

2 Large exposures downgraded: Performing to Loss

Other shocks shall be used based upon the stress testing guidelines of the bank.

8.2.2 Market Shocks

A. Interest Rate Risk

Deposit interest rate change by (+,-)	1%
Deposit interest rate change by (+,-)	1.5%
Deposit interest rate change by (+,-)	2%
Loan interest rate change by (+,-)	1%
Loan interest rate change by (+,-)	1.5%
Loan interest rate change by (+,-)	2%

Other shocks shall be used based upon the stress testing guidelines of the bank.

B. Exchange Rate Shocks

20% currency exchange rate decrease

20% currency exchange rate increase

Other shocks shall be used based upon the stress testing guidelines of the bank.

C. Equity Price Shocks

Fall in the equity prices by	50%

8.2.3 Liquidity Shocks

Withdrawal of deposit 1st day by	2%
Withdrawal of deposit 2nd day by	5%
Withdrawal of deposit 3rd day by	10%
Withdrawal of deposit 4th day by	10%
Withdrawal of deposit 5th day by	10%
Withdrawal of deposit by	5%

Withdrawal of deposit by 10%

Withdrawal of deposit by 15%

Withdrawal of deposit by 20%

Top 2 institutional depositors withdraw deposit

Top 3 institutional depositors withdraw deposit

Top 5 institutional depositors withdraw deposit

Top 2 individual depositors withdraw deposit

Top 3 individual depositors withdraw deposit

Top 5 individual depositors withdraw deposit

2 top counter parties default on interbank

8.3 Result of stress testing

Following report shall be generated on stress testing

NCC Bank Limited

Stress Testing Result

AS on …………………

		Pre Shock CAR: ……% Pre Shock NPL: ……%			
		After shock			
Credit Shock		**CAR (%)**		**NPL %**	
C1	15 Percent of Performing loans deteriorated to substandard				
	15 Percent of Substandard loans deteriorated to doubtful loans				
	25 Percent of Doubtful loans deteriorated to loss				

	loans. 5 Percent of Performing loans deteriorated to loss loans.				
C2	All NPLs under substandard category downgraded to doubtful. All NPLs under doubtful category downgraded to loss.				
C3	25 Percent of performing loan of Real Estate loan directly downgraded to substandard category of NPLs.				
C4	25 Percent of performing loan of Real Estate loan directly downgraded to Loss category of NPLs.				
C5	Top 2 Large exposures downgraded: Performing to Substandard				

	Market Shocks	CAR (%)
	Interest Rate Shocks	
IR-1a	Deposits interest rate change (+,-) by 1% on an average.	
IR-1b	Deposits interest rate change (+,-) by 1.5% on an average.	
IR-1c	Deposits interest rate change (+,-) by 2% on an average.	
IR-2a	Loan interest rate change (+,-) by -1% on an average.	
IR-2b	Loan interest rate change (+,-) by -1.5% on an average.	
IR-2c	Loan interest rate change (+,-) by -2% on an average.	
	Exchange Rate Shocks	
ER1a	Depreciation of currency exchange rate by 20%	

	Equity Price Shocks	
EQ-1	Fall in the equity prices by 50%	

	Liquidity Shocks	Illiquid After Shock?	Remaining Liquid Assets
L-1a	Withdrawal of deposits: 1st day by 2%		
	Withdrawal of deposits: 2nd day by 5%		
	Withdrawal of deposits: 3rd day by 10%		
	Withdrawal of deposits: 4th day by 10%		
	Withdrawal of deposits: 5th day by 10%		

	Liquidity Shocks Pre Shock Liq. Ratio: ....%	After Shock	
		CAR (%)	Liq. Ratio
L-2a	Withdrawal of deposits by 5%		
L-2b	Withdrawal of deposits by 10%		
L-2c	Withdrawal of deposits by 15%		
L-2d	Withdrawal of deposits by 20%		
L-3a	Withdrawal of deposits by top 2 institutional depositors.		
L-3b	Withdrawal of deposits by top 3 institutional depositors.		
L-3c	Withdrawal of deposits by top 5 institutional depositors.		
L-3d	Withdrawal of deposits by top 2 individual depositors.		
L-3e	Withdrawal of deposits by top 3 individual depositors.		
L-3f	Withdrawal of deposits by top 5 individual depositors.		

	Liquidity Shocks Pre Shock Liq. Rato: .... %	After Shock	
		CAR (%)	Liq. Ratio

L-4	Default on Interbank by Top 2 Counterparties		

The reporting formats/patterns can be changed on need basis by management.

8.4 Periodical Review

Stress testing and shock analysis shall be conducted on quarterly basis. Results of stress testing shall be reported to Risk Management Committee and Senior Management. If any cases are identified that are most probable to happen as per stress testing result, that has to be addressed immediately on business plans and capital planning both.

9. Contingency & Mitigation Plan

Apart from internal risk, bank is exposed to external risks on which it does not have any control. Such risks may include changes in political/ legal/ regulatory environment, natural disasters, severe competition, external attacks and frauds, etc.

There shall be a contingency and mitigation plan to tackle with every possible unfavorable event bank faces in its operations. The contingency plans shall be prepared on need basis time to time. If necessary, bank may adjust the capital on estimation of the future probable losses from external factors like: impact of flood, earthquake, industry damage, political damages etc.

10. Comparison of ICAAP's outcome with the regulative capital requirements; Justification of Differences

The ICAAP result shall be discussed and compared with regulative capital requirement at least once in a year. ICAAP result shall reflect the comparison of the annual quantitative business strategy and capital planning against the actual status. The same result shall also be compared against the regulative requirements and differences shall be discussed in details. The comparison of ICAAP outcome with the regulative capital requirements shall be prepared by finance department and report to Senior Management, Risk Management Committee and Board of Directors eventually.

11. Internal Control Mechanisms

11.1 Independent Risk Management Departments review the ICAAP implementations on periodical basis and report to the management and Risk Management Committee. Similarly, the ICAAP results will be reported to Board of Directors at least once in a quarter through risk management committee. The BOD is entitled with the responsibility to ensure that sound internal control mechanism has been devised and implemented for ICAAP adoption.

Similarly, BoD regularly reviews that internal control system devised for ICAAP is working properly and if need arises appropriate changes shall be made.

11.2 ICAAP would lose its value if it is viewed as the risks reporting tool only. It is used as a crucial criteria to be met in the decision making process of the bank. The results and reports generated by the ICAAP serve as a basis for management decisions and bank control. The management must make its decisions independently and on the basis of the information of all relevant risks and other risk factors ensure that adequate capital is maintained at all times.

11.3 As mandated by the ICAAP guidelines issued by Nepal Rastra Bank, ICAAP result, internal control mechanism and its compliance in the bank shall be independently reviewed at least once in a year. The quantitative result of the ICAAP and the review report with the appropriate changes in the ICAAP policy of the bank shall be reported to Nepal Rastra Bank within a month after the end of the fiscal year.

12. Review & Reporting

12.1 Periodical Review

ICAAP shall be reviewed at least on annual basis about its effectiveness and completeness of measuring internal risk level and capital requirements. Internal audit shall review the process of ICAAP on half yearly and report to Board through Audit Committee with minimum matter of:

- Whether the risk assessment process followed by bank is adequate and confirms to formulate policies;
- Whether the measurement of risk in quantitative terms is reasonable;
- Whether the capital allocated to each risk is adequate;
- Whether there has been any breach of policies etc

12.2 Regulatory Reporting

Bank shall report to NRB the formulation and implementation of ICAAP on an annual basis within three month of fiscal year end. The report shall incorporate the following contents.

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

Further, compliance department regularly monitors the implementation and effectiveness of the ICAAP. The department shall prepare the yearly report as per regulatory requirements and submits report to Management and NRB.

13. Duties and Responsibilities

13.1 The operational implementations responsibilities of the ICAAP Policy are to Finance Department. Finance department calculates the regulatory and internal capital requirements and submits the report to senior management and Board.

13.2 Business units, risk units, branches and head office departments report the risk factors, incident reporting, risk events, loss events to designated persons of various risk committees/functions for identifying, recording, assessing, measuring and controlling the risks.

13.3 Respective risk committees assess the risk on their areas and submit the report to designated authorities.

13.4 The Board of Director is responsible for setting the risk appetite of the bank and ensuring that bank's business remains within the desired level.

13.5 Board and Senior Management jointly ensure that formalities and structure of risk management process are appropriate in line of risk profile and business plan.

13.6 Board is primarily responsible for ensuring the current and future capital needs of the bank in relation to strategic objectives.

13.7 ICAAP does not become just the compliance issue as senior management delegates to lower level staff; board and senior management will be clearly involved in the issue and push forward the process development and integrate it into the ongoing operations and planning.

13.8 The internal audit and compliance function should assist the senior management and Board by independently reviewing implementation and effectiveness of risk management procedures and ICAAP.

14. Implementation and Effectiveness

ICAAP comes into implementation upon the approval of Board of Directors.

ICAAP implementation is basically measurement of capital position as per regulatory requirements and bank's internal mechanism of calculating economic capital. In general, there will be equal value of capital except exceptional. The exceptional cases shall be clearly identified and adjusted with due acceptance of management and board of the bank. The difference on regulatory capital requirements and capital requirements as per ICAAP shall be clearly justified.

Practice of ICAAP implementation would ensure the following questions all the time as key measuring tool. If the answers are not found satisfactory, it should be assumed that ICAAP is not up to minimum requirements. Compliance department on their regular job prepare the checklist and prepare report accordingly for measuring ICAAP effectiveness.

Business and Strategic Plan

- Does it contain clear description of banks business and sources of revenue?
- Bank duly cares business, capital and liquidity implications on its strategies.

Financial Plan

- Bank prepares financial forecasts considering both capital adequacy and liquidity for at least 3 years.
- Bank has clear strategies of profit distribution and capital position impact for at least 3 years.

Risk management:

- Bank identifies and record all types of risk observed

Stress and scenario Testing:

- Scenarios testing and shock analysis are regular.
- Stress test results are discussed on Board and Senior management level; and regular reporting to NRB

Liquidity

- Bank defines the liquidity risk profiles and planning.
- Bank shall have plan for crisis funding in the event of a liquidity problem.

Board and Senior Management oversight

- Has the bank succeeded in integrating the ICAAP into the bank's governance structure and organization, like: formulating dedicated committee?
- Is senior management overseeing, setting and monitoring risk appetite and strategy?
- Does the board have a comprehensive picture of all material risks?
- Does the bank have mechanism for defining risk appetite that is closely related to the bank's business strategy?
- Does the bank regularly reconcile capital and strategic planning and ensure consistency between business and risk management strategies?
- Has the bank succeeded in translating the risk appetite into a comprehensive and workable limit system?
- Do stress test plays sufficient & prominent role in the bank's ICAAP?