The Republic of the Union of Myanmar Ministry of Hotels and Tourism (MoHT)

The Detailed Planning Survey on Establishment of the Pilot Model for Regional Tourism Development in the Republic of the Union of Myanmar

Final Report

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Currency

1USD = 103.41 JPY

1MMK = 0.104 JPY

JICA Foreign Currency Rate (July 2014)

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Abbreviation

ACCSTP ASEAN Common Competency Standard for Tourism Professionals

ADB Asian Development Bank

ADSL Asymmetric Digital Subscriber Line
AEC ASEAN Economic Community
ALS Average Length of Stay

ASEAN Association of Southeast Asian Nations

ASI Archaeological Survey of India
ATMS ASEAN Tourism Marketing Strategy
ATSP ASEAN Tourism Strategic Plan

AZ Ancient Zone

BBC British Broadcasting Corporation
BGCC Bagan Golf & Country Club
BOT Build Operate Transfer

CATC Common ASEAN Tourism Curriculum

CBT Community Based Tourism
CEP Core Environment Program

CIT Community Involvement in Tourism

CNN Cable News Network

CT Scan Computed Tomography scan

DOA Department of Archeology, MoCul

F&B Food and Beverage

FESR Framework for Economic and Social Reform

FFI Flora and Fauna International
FIT Foreign Individual Tourist
GAD General Affairs Department
GDP Gross Domestic Product

GIS Geographic Information System

GIZ Gesellschaft für Internationale Zusammenarbeit

GRDP Gross Regional Domestic Product

H/P Home Page

HRD Human Resource Development
HSF Hanns Seidel Foundation
HTI Hospitality Training Initiative

ICAO International Civil Aviation Organization

ICIMOD International Centre for Integrated Mountain Development

ICT Information and Communications Technology

IMS Integrated Management System

INBAS Institute for Vocational Training, Labour Market and Social Policy, Germany

JATA Japan Association of Travel Agents

JCC Joint Coordination Committee

JFPD Japan Fund for Poverty Reduction

JICA Japan International Cooperation Agency

JSPP21 Japan-Singapore Partnership Programme for the 21st Century

JV Joint Venture

KOIKA Korea International Cooperation Agency

LAN Local Area Network

M/P Master Plan

MDCF Myanmar Development Cooperation Forum

MHA Myanmar Hotel Association

MHPA Myanmar Hospitality Professionals Association

MICE Meeting, Incentive, Convention/Congress, Event/Exhibition

M/M Minutes of Meeting MMK Myanmar Kyat

MNCCC Myanmar National Culture Central Committee

MoCul Ministry of Culture, Myanmar MoE Ministry of Education, Myanmar

MoECAF Ministry of Environmental Conservation and Forestry, Myanmar

MoFA Ministry of Foreign Affair, Japan

MOHT Ministry of Hotels and Tourism, Myanmar MPT Myanmar Post and Telecommunication MRA ASEAN Mutual Recognition Arrangement

MRI Magnetic Resonance Imaging
MTF Myanmar Tourism Federation
MTF Mekong Tourism Forum

MTGA Myanmar Tourist Guide Association

MTHRDA Myanmar Tourism Human Resource Development Association

MTM Myanmar Tourism Marketing
MTT Myanmar Travel & Tours
MTU Mobile Training Unit
MZ Ancient Monument Zone

NCDP National Comprehensive Development Plan

NSSA National Skill Standard Authority
NTO National Tourism Organization
NTPB National Tourism Professional Board

OJT On-the-job Training

OUV Outstanding Universal Value
PTA Pacific Asia Travel Association

PYUCOM Pyu Ancient Cities Co-ordinating Committee

PZ Preservation Zone

SDC Swiss Agency for Development and Cooperation
SHTEC International Hotels and Tourism School in Singapore

SME Small and Medium-Sized Enterprises

SNS Social Networking Service

SWOT Strength, Weakness, Opportunities and Threats

TDC Township Development Council
TIC Tourist Information Center

TOT Training of Trainers

TPCB Tourism Professional Certification Board

TSWG Tourism Sector Working Group

UN United Nations

UNDP UN Development Programme

UNESCO UN Educational, Scientific and Cultural Organization

UNWTO UN World Tourism Organization URL Uniform Resource Locator

USD U.S.Dollar

VFM Value for Money

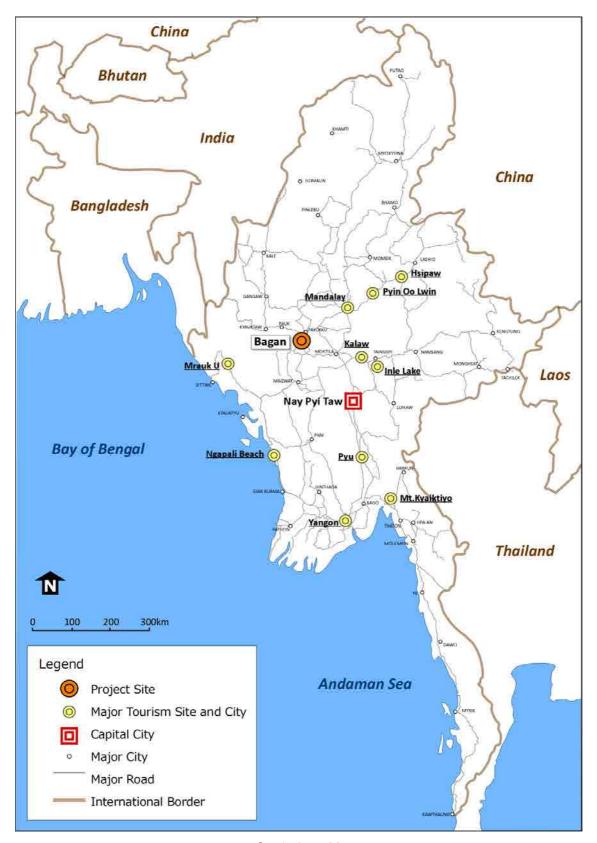
VSDP Vocational Skills Development Program

WCS Wildlife Conservation Society

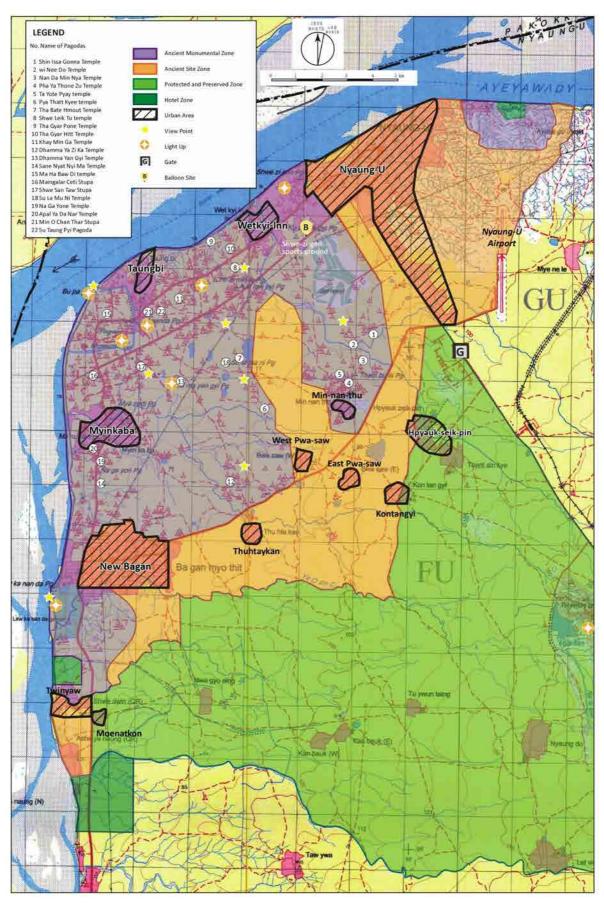
WG Working Group
WG1 Working Group 1
WG2 Working Group 2
WG3 Working Group 3

WHO World Health Organization

WTTC World Travel and Tourism Council



Study Area Map 1



Study Area Map 2

CHAPTER 1 INTRODUCTION

In this chapter, the background, objectives and "Myanmar Tourism Master Plan 2013-2020" which is a principle role of tourism development planning in Myanmar are focused on in order to well understand the Technical Cooperation Project on the Establishment of a Pilot Model for Regional Tourism Development in the Republic of the Union of Myanmar.

1.1 Background

The Republic of the Union of Myanmar (hereinafter referred as Myanmar) has considerable potential for tourism development because of its rich natural and cultural resources. The adoption of the economic open-door policy and democratization in 2010, as seen the number of tourists to Myanmar has increased sharply in proportion to the growth of foreign investments. The number of tourists rose from approximately 0.21 million in 2003 to 1.06 million in 2012. In order to keep earning foreign exchange and stimulating the service industry through tourism development, a wide range of approaches are to be considered. These include; development and conservation of tourism resources, stimulation and control of private investments, enhancement of administrative capabilities, human resource development in the tourism sector and improvement of infrastructure. Taking these into account, the Government of Myanmar with support from the Asian Development Bank (ADB) and Norwegian government have prepared the "Myanmar Tourism Master Plan 2013-2020" (hereinafter referred as Myanmar Tourism M/P), which is summarized in the section 1.3. The mid-range expectation of this plan is that the number of tourists is expected to reach 3.68 million in 2020.

Based on the strategies in the Myanmar Tourism Master Plan, Japan International Cooperation Agency (JICA) has had several discussions with the Ministry of Hotels and Tourism (MoHT) in order to conduct "The Technical Cooperation Project on the Establishment of a Pilot Model for Regional Tourism Development in the Republic of the Union of Myanmar" (hereinafter referred as "the Project") that aims at strengthening the structure for regional tourism development by means of conducting pilot projects as an initial step to realizing the master plan expectations. Bagan was selected as the model area due to various issues that include the recent urbanization and development despite being one of the most famous tourist sites in Myanmar and its anticipated further increase of in tourist numbers.

In order to implement the Project smoothly, a survey named "The Detail Planning Survey on the Project for Establishment of the Pilot Model for Regional Tourism Development (hereinafter referred as "the Survey")" will be carried out from April to July 2014.

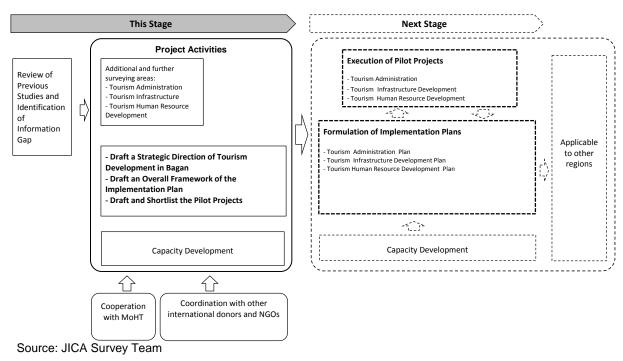


Figure 1.1 The Procedure to the Project

1.2 Objectives

The Survey Team will collect detailed information/data, and coordinate with the relevant organizations in order to support the Project implementation. The objective of the Survey will be to select priority pilot projects and to propose the action program of the Project. The key focus of these priority projects under the Project are the following:

- Tourism management and administration development in Bagan
- Tourism infrastructure development in Bagan
- Tourism human resource development in Bagan

1.3 Myanmar Tourism Development Master Plan 2013-2020

1.3.1 Background of Myanmar Tourism Master Plan 2013-2020

After the democratization and liberalization of politics and economy in Myanmar in March 2011, the Government of Myanmar devoted itself to political and economic reforms. In 2012, the Government of Myanmar established a Framework for Economic and Social Reform (FESR). The FESR shows both long term policies targeting 2030 and short term policies targeting 2014 and is positioned to indicate principles for ministries to make plans. The FESR focuses on 10 priority sectors referred to as "Quick Wins". Among the Quick Wins, private sector development is taken into account under the 4th Quick Win which highlights tourism and its regulatory reform. Tourism is recognized as the sector which has the best growth opportunity and is required to be well managed to maximize benefits.

On the other hand, "National Comprehensive Development Plan (NCDP)," established in 2011, shows a long term development plan in 4 phases of 5 year plan periods. Part 1 of the NCDP

focuses on the macro-economic vision and Part 2 of the NCDP deals with the 16 sector plans under a field of (1) economic growth and employment, (2) social development and (3) natural resource management and environment conservation. Tourism is taken into consideration in part (1) economic growth and employment with expected effects on economic development and employment in remote areas.

To meet expectations in tourism development, the MoHT developed three policies. The first policy is shown in the "Myanmar Responsible Tourism Policy (RTP)" which aims to realize sustainable tourism development. "Responsible Tourism" means maximization of benefits in economic, social and environmental aspects as well as minimization of cost to the destination through proper coordination and management. To achieve this, the RTP indicates nine (9) objectives.

Second policy is "Policy on Community Involvement in Tourism (CIT)." The CIT is prepared to accelerate involvement of the local community in tourism. The CIT shows guidelines and action points to progress with involvement of local communities in tourism which is mentioned in the RTP.

The last one is Myanmar Tourism M/P. The Myanmar Tourism Master Plan is developed to materialize the 9 objectives of the RTP under cooperation with ADB and the Norwegian Government and began in November 2013.

1.3.2 Vision of the Myanmar Tourism Master Plan

The vision described in the Myanmar Tourism M/P defines Myanmar tourism as that which creates better living environment, more employment and more business opportunities, to contribute to natural and cultural heritages and welcome foreign peoples who respect indigenous Myanmar, as written in the following sentence:

"We intend to use tourism to make Myanmar a better place to live in, to provide more employment and more business opportunities for all our people, to contribute to the conservation of our cultural heritage and to share our rich cultural diversity. We warmly welcome all those who appreciate and enjoy our heritage, our way of life, and who travel with respect."

1.3.3 Guiding Principles

In order to realize the vision, the Master Plan adopted the following nine aims of the Myanmar Responsible Tourism Policy as guiding principles:

- Develop tourism as a national priority sector
- Promote broad-based local social and economic development
- Maintain cultural diversity and authenticity
- Conserve and enhance Myanmar's protected areas and natural environment
- Compete on product richness, diversity and quality
- Ensure the health, safety and security of visitors;
- Strengthen institutional capacity to manage tourism
- Develop a well trained and rewarded workforce; and,
- Lastly minimize unethical practices.

1.3.4 Future Target

Based on the experience of tourism development in the neighboring countries in the Mekong Region, the master plan focused on three aspects which are; "conservative", "mid-range" and "high growth" for future development up to 2020 in terms of number of tourists, revenue and tourism employment.

Table 1.1 Future Forecast of Number of Tourists, Revenue and Tourism Employment

| | Conser | vative | Mid-range | | Mid-range High Growth | | rowth |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------------------|-----------|-------|
| | 2015 | 2020 | 2015 | 2020 | 2015 | 2020 | |
| International Arrivals | 1,528,020 | 2,815,279 | 1,829,943 | 3,680,669 | 3,009,663 | 7,489,006 | |
| Tourist Expenditure (USD Bill) | 1.83 | 3.82 | 2.19 | 5.00 | 3.61 | 10.18 | |
| Tourism Employment | 424,450 | 563,056 | n.a. | n.a. | 836,018 | 1,497,801 | |

Source: Tourism Master Plan 2013-2020, MoHT

1.3.5 Strategic Programs

Based on the vision and aims, the six strategic programs and key objectives were set as illustrated in the table below.

Table 1.2 Strategic Programs and Key Objectives of the Master Plan

| Strategic Program | Key Objectives |
|--|--|
| Sudlegie Frogram | 1.1: Establish a Tourism Executive Coordination Board Chaired at the Vice President Level. |
| 1: Strengthen the Institutional | 1.2: Develop a Tourism Planning Framework to Support the Tourism Executive Coordination Board. |
| Environment | 1.3: Strengthen Tourism Information Systems and Metrics. |
| | 1.4: Develop Systems to Promote Visitor Safety and Consumer Protection. |
| | 1.5: Strengthen Tourism's Legal and Regulatory Environment |
| | 2.1: Design a Human Resource Development and Capacity Building Strategy. |
| 2: Build Human Resource Capacity and Promote Service Quality | 2.2: Establish Programs and Action Plans to Implement the National HRD Strategy. |
| , | 2.3: Develop a Multi-Stakeholder Framework and Policies to Improve Service Quality. |
| | 3.1: Develop Innovative and Integrated Approaches to Destination Planning and Management. |
| | 3.2: Strengthen Tourism-related Social and Environmental Safeguards |
| 3: Strengthen Safeguards and | 3.3: Improve Zoning In Tourism Destinations. |
| Procedures for Destination Planning and Management | 3.4: Develop Adaption Frameworks and Strategies on Tourism and Climate Change. |
| | 3.5: Promote Innovative and Green Technologies in Tourism. |
| | 3.6: Strengthen Community Involvement in Tourism. |

| Strategic Program | Key Objectives | | |
|-----------------------------------|--|--|--|
| 4.5 | 4.1: Design Tourism Product Development Strategies. | | |
| 4: Develop Quality Products and | 4.2: Develop an Ecotourism Management Strategy for Protected Areas. | | |
| Services | 4.3: Strengthen Tourism-Related Supply Chains. | | |
| | 5.1: Promote Complementary Expansion of the Aviation and Tourism Industries | | |
| 5: Improve Connectivity and | 5.2: Ensure Tourism is Included as a Key Element of the National Transportation Strategy | | |
| Tourism-related Infrastructure. | 5.3: Improve Tourism-Related Infrastructure to Promote Balanced and Inclusive Growth. | | |
| | 5.4: Progressively Ease Barriers to Visitor Entry and Internal Travel. | | |
| | 6.1: Determine the Supply, Demand and Gap Characteristics of Myanmar's Travel and Tourism System. | | |
| 6: Build the Image, Position, and | 6.2: Create a Strategic Marketing Map for Myanmar | | |
| Brand of Tourism Myanmar | 6.3: Raise Internal Awareness of Responsible Tourism. | | |
| | 6.4: Effectively Manage the Image, Position, and Brand of the Destination in the Collective Mind of the International Marketplace. | | |

Source: Tourism Master Plan 2013-2020, MoHT

The following Seven cross-cutting themes are also emphasized in the master plan as stated below.

- Gender equity
- · Environmental sustainability
- Partnerships
- Innovative financing
- · Regional cooperation
- Ensure access for disabled people
- Consultation and participation

In order to achieve the purpose of the master plan, thirty eight (38) projects are planned in line with the strategic programs and key objectives have been explained before. From the 38 projects, twenty three (23) projects and programs are prioritized. Total estimated costs for the projects are in the following table.

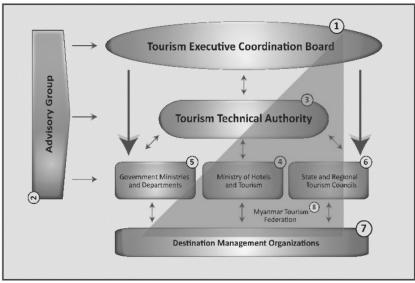
Table 1.3 Cost Estimates for the Strategic Program

| Strategic Program | Cost Estimates for All Projects (\$ millions) | Cost Estimates for Priority Projects (\$ millions) |
|---|---|--|
| Strengthen the Institutional Environment | 2.65 | 2.65 |
| 2. Build Human Resource Capacity and Promote Service Quality | 59.50 | 26.00 |
| 3. Strengthen Safeguards and Procedures for Destination Planning and Management | 164.70 | 12.00 |
| 4. Develop Quality Products and Services | 6.45 | 4.45 |
| 5. Improve Connectivity and Tourism-related Infrastructure | 251.00 | 168.00 |
| 6. Build the Image, Position and Brand of Tourism Myanmar | 2.50 | 2.50 |
| Total | 486.80 | 215.60 |

Source: Tourism Master Plan 2013-2020, MoHT

1.3.6 Implementation of the Master Plan

The Implementation structure is planned so as to realize the master plan as illustrated in the figure below. Tourism development in each tourism destination plans to be mainly done by the "Destination Management Organization (DMO)". This organization consists of representatives of public organizations, the private sectors and local communities which are expected to be led by the MoHT.



Source: Tourism Master Plan 2013-2020, MoHT

Figure 1.2 Implementation Structure of the Master Plan

1.3.7 Progress of the Master Plan

Tourism Executive Coordination Board, which is proposed in the Myanmar Tourism M/P as shown in [1] of Figure 1.2, was established as "The Central Committee for Development of National Tourism Industry". The Vice President chairs the committee and the MoHT Union Minister is the secretary of the committee. The first meeting was held on 4 April 2014 to discuss the byelaw of the Union Government (No 29/2014), which describes members, aims and roles on the committee. The members and roles are as follows:

Member

| • | Vice President | Chairman |
|---|---|----------|
| • | Union Minister (Home affairs) | Member |
| • | Union Minister (Foreign affairs) | Member |
| • | Union Minister (Cooperatives) | Member |
| • | Union Minister (Communication and information technology) | Member |
| • | Union Minister (Transport) | Member |
| • | Union Minister (Environmental conservation and forestry) | Member |
| • | Union Minister (Immigration and population) | Member |
| • | Union Minister (Culture) | Member |
| • | Union Minister (Finance) | Member |

Union Minister (National planning and economic development) Member Union Minister (Rail transportation) Member Union Minister (Health) Member Union Minister (Hotel and Tourism) Secretary Director General (Directorate of Hotel and Tourism) Joint-Secretary Prime Ministers (Regional Government) Member Chairman (MTF) Member Chairman (Federation of Chambers of Commerce and Industry) Member

Roles

- Making tourism master plans at national and regional levels.
- Implementing projects along with the master plan.
- Requesting assistance and cooperation to implement priority projects, if necessary.
- Establishing a tourism development committee and a tourism industry supervision, committee in the region and destination levels in order to make policy and strategy for maintaining a sustainable tourism industry
- Following up on reports from Myanmar Tourism Federation and the proposed tourism development committee in the region and destination levels.
- Discussing necessary measurements to correspond to increase of foreign tourists and to increase tourism employment.
- Carrying out National Branding Campaigns and tourism promotions to improve on the level of recognition of tourism destinations in Myanmar to the international society.
- Promoting and supporting workshops, seminars, academic conference contributing to tourism industry.
- Promoting creation of new tourism destinations and to enhance sustainability of existing tourism destinations and tourism resources.
- Considering a holistic system of entrance and entry fees of tourism destinations and using part of it for Responsible Tourism.
- Designating tourism zones on various tourism resources for developing basic infrastructure in the tourism zone.
- Promoting Green Tourism that encourages the natural environment in tourism including monitoring the effects of weather conditions on the natural environment.
- Formulating policies and measures to promote natural environment based tourism that contributes to both natural environment and tourism industry at protected areas
- Making a plan to get funds from the national budget and foreign aids to develop infrastructure for tourism
- Identifying tourism as an important sector in National Transport Master Plan.
- Amending legislation relevant to tourism to become more modernized.
- Establishing tourist police to improve security at tourism destinations.
- Fostering and assisting basic tourism businesses such as hotels, guides, restaurants, transport, souvenir, medical care and exchange.
- Improving higher education on tourism at tourism training schools and universities.
- Supervising and properly guiding the tourism industry to avoid destruction of natural environment and cultural heritage, minimizing social and economic problems
- Regulating and eliminating imbalances between tourist visits and capacity of tourism destination.
- Analyzing and presenting data/information on ripple effects to the economy, living standards and poverty alleviation.
- Establishing laws and regulations necessary for outbound-Burmese tourists.

- Promoting domestic tourism.
- Organizing Sub Committees, if necessary.

As the next action to be taken, regional tourism committee and the DMO are expected to be established, however there is no action observed on his matter at this moment. Meanwhile there are discussions between the MoHT and donors to initiate certain priority projects identified in the master plan.

1.3.8 Donor Coordination

Myanmar Development Cooperation Forum (MDCF) is organized in January 2013. The MDFC aims to discuss current development achievements and issues among ministries concerned and donors. The MDFC is chaired by the president. Under the MDCF, 17 of sector working groups are also organized, which discuss current achievements, issues and donor coordination in the respective sector. One of the 17 working groups is tourism sector. MoHT together with ADB and Germany play joint chairman to manage Tourism Sector Working Group (TSWG). The first TSWG is held in September 2013 and the second TSWG is held in February 2014.

1.4 Socio-economy of Bagan

1.4.1 Administrative Boundary

Bagan is located in Nyaung-U District in Mandalay Region at the administrative boundary. Nyaung-U District consists of Nyaung-U Township and Kyaukpdaung Township. Heritage of Bagan is scattered on the boundary of Nyaung-U Township. Nyaung-U Township consists of Nyaung-U Town, New Bagan Town, Nga Tha Yout Townand some villages. So-called "Old Bagan", which has majority of heritage, and is the area located at Nyaung-U Town and some villages.

The administrative boundary of Bagan is shown in Figure 1.3

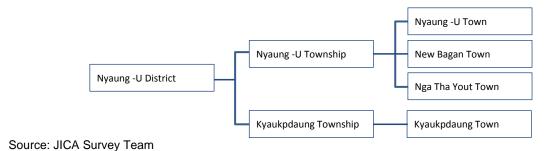


Figure 1.3 Administrative Constitution of Mandalay Region

1.4.2 Population

Bagan is in Nyaung-U Township as mentioned above. Nyaung-U Township has a population of approximately 196,000 people as of 2014. Among them, Nyaung-U Town and New Bagan Town have approximately 27,000 persons and 12,000 persons respectively in 2014. The population

growth rate is very low. If the natural growth rate is assumed to be the same as the population increase rate of the nation which is approximately 1.0 percentage per year. Nyaung-U Township has had a decrease in population which means that Nyaung-U Township has a considerable emigration. In fact, according to the interview at the Department of Population and Immigration, majority of the young generation leave the township after high school.

Table 1.4 Population of Nyaung U Township

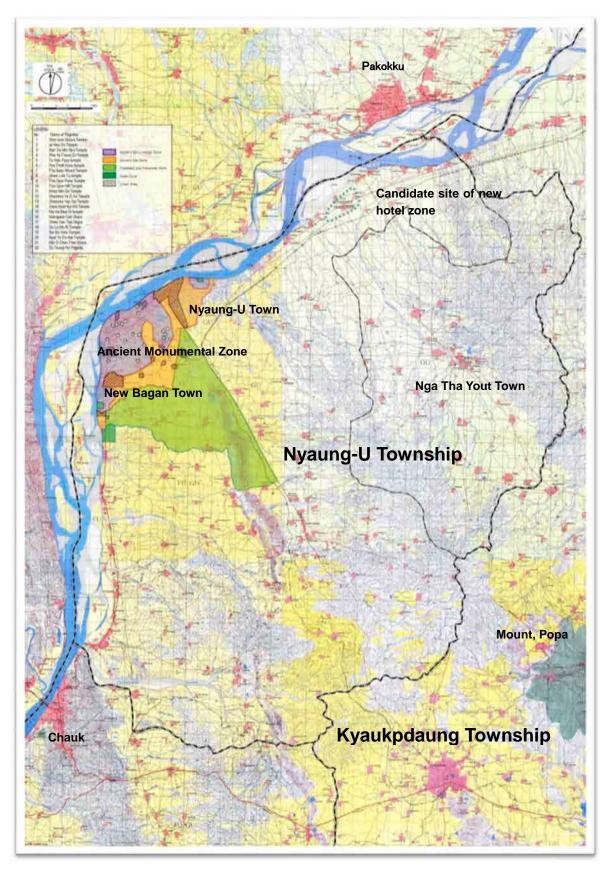
| Year | Nyaung-U Township (a+b+c+d) | Nyaung-U Town (a) | New Bagan Town (b) | Nga Tha Yout Town (c) | Villages (d) |
|------|-----------------------------------|-------------------------|--------------------------|-----------------------------|--------------|
| 2005 | 236,101 | 24,346 | 10,745 | 49,041 | 151,969 |
| 2006 | 231,657 | 24,369 | 10,852 | 44,561 | 151,875 |
| 2007 | 232,134 | 25,092 | 10,937 | 44,503 | 151,602 |
| 2008 | 233,285 | 25,205 | 10,953 | 44,572 | 152,555 |
| 2009 | 233,213 | 25,185 | 11,049 | 44,486 | 152,493 |
| 2010 | 241,382 | 26,897 | 12,313 | 44,480 | 157,692 |
| 2011 | 241,233 | 26,909 | 12,287 | 44,449 | 157,588 |
| 2012 | 241,580 | 26,900 | 12,257 | 45,171 | 157,252 |
| 2013 | 241,720 | 26,970 | 12,276 | 45,538 | 156,936 |
| 2014 | 241,981 | 27,207 | 12,405 | 45,707 | 156,662 |

Source: Department of Population and Immigration, Bagan

As illustrated in Figure 1.3, Kyaukpdaung Township with a population of 291,474 in 2014 has been integrated into Nyaung-U District since April 2014. For taking account of geographical feature, the demand forecast carried out based upon the population of Nyaung-U Township.

Although Myanmar has 135 of ethnic minority groups, more than 90% of people in Bagan are Barmar with few numbers of ethnic minorities (mainly Karen). There is no specific settlement concentrating the minorities in Bagan.

Nyaung-U District Map is illustrated in following figure including Nga Tha Yout Township.



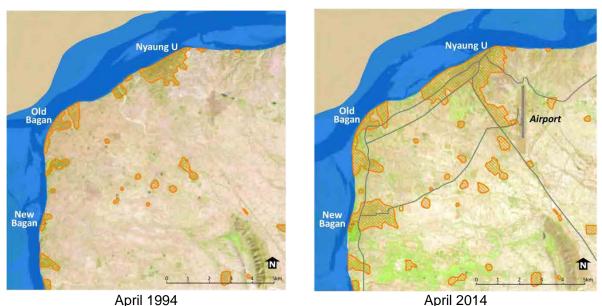
Source: JICA Survey Team

Figure 1.4 Nyaung-U District Map

1.4.3 Urbanization and Landuse

Population of Nyaung-U Township gradually increases with out-migration. Nyaung-U Town and New Bagan Town have about 200~300 persons of population increase per year. In accordance with such slow population increase, urban area expands slowly.

Figure 1.5 shows urban growth based on satellite images taken in 1994 and 2014. The orange marked areas in the maps indicate clusters of industrial and residential areas. It can be observed that arterial roads and the airport were not fully established and that the residential clusters were limited in 1994. After 20 years, residential areas have been developed while preserving historical heritage sites in the Archaeological Zone classified into three zones: Ancient Monument Zone, Ancient Zone and Preservation Zone. Expansion into Nyaung-U and New Bagan areas are particularly notable. Urbanization is proceeding alongside arterial roads as a general trend. Urbanization in Bagan follows the same trend. Development is restricted in Zee Oh Thit Hla sacred forest (approximately 25 km south of Nyaung-U) in addition to the archeological area and Mt. Popa National Park; all of which local people regard as sacred.



Source: the maps based upon the Landsat data from USGS and modified by JICA Survey Team

Figure 1.5 Comparison Maps of Bagan in 1994 and 2014

Bagan district has two townships and land use for each township is summarized below. The primary land use (60%) is agriculture. Main crops are peanut, sesame, cotton and corn which are cultivated and harvested only in the rainy season (May to October) due to sparse rainfall in this area. Most farmers are small scale and some of them have part-time jobs in tourism.

Table 1.5 Land Use in 2013(ha)

| Land Use | Nyaung-U Township | | Nga Tha Yout Township | |
|-----------------------------|-------------------|----|-----------------------|----|
| Built Up Area | 3,245 | 3% | 705 | 2% |
| Industrial Land | 8 | 0% | 0 | 0% |
| Religious and Monument Area | 1,308 | 1% | 98 | 0% |
| Transport Facility Area | 2,384 | 2% | 573 | 2% |

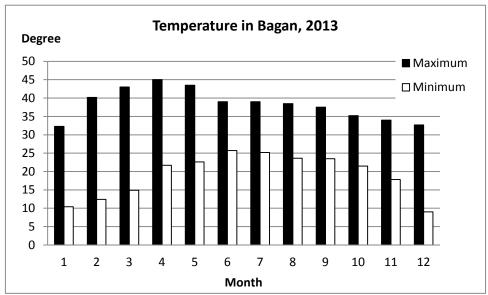
| Land Use | Nyaung-U | Township | Nga Tha Yout Township | | | |
|---------------------------|----------|----------|-----------------------|------|--|--|
| Agricultural Land | 68,794 | 61% | 21,632 | 62% | | |
| Natural Conservation Area | 1,857 | 2% | 0 | 0% | | |
| Wild Forest | 14,913 | 13% | 7,466 | 21% | | |
| Water-body | 10,447 | 9% | 2,005 | 6% | | |
| Others | 10,607 | 9% | 2,300 | 7% | | |
| Total | 113,564 | 100% | 34,779 | 100% | | |

Source: Department of Land, Bagan

Note*1:Nya Tha Yout Township is merged with Nyaung U Township in 2014, then becomes Nga Tha Yout Town.

1.4.4 Natural Condition

Just like other areas in Myanamar, Bagan enjoys the monsoon climate and has two seasons: rainy season from May to October and dry season from September to April. However in terms of temperature and rainfall Bagan is substantially different from other areas in the country due to the semi-arid environment. Therefore the average temperature is relatively high, above 30 degree Celsius, all year round. In the dry season the temperature between night and day has a large difference which is conducive and attracts very many tourists hence the high season for tourists in Bagan.



Source: Department of Meteorology and Hydrology, Nyaung-U Township, Myanmar

Figure 1.6 Temperatures in Nyaung-U Township in 2013

With regard to the rainfall in Bagan, it is surprisingly small compared to other regions. In 2013 the number of rainy days recorded was only 42 and the precipitation was 30mm.

Table 1.6 Monthly Precipitation in Nyaung-U Township in 2013 (mm)

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|------|------|------|------|------|------|------|------|-------|------|------|------|-------|
| 0.00 | 0.00 | 0.00 | 0.00 | 2.65 | 3.88 | 0.36 | 3.20 | 12.26 | 9.03 | 0.00 | 0.04 | 31.42 |

Source: Department of Meteorology and Hydrology, Nyaung-U Township, Myanmar

Due to this climate, the flora of Bagan is generally different from other areas and protected in the case of national parks and conservation areas. In general, national parks in Myanmar are defined in the "Protection of Wildlife and Wild Plants and Conservation of Natural Areas Law" and managed by Ministry of Environmental Conservation and Forestry (MoECAF). According to the law, habitation, harvesting and hunting in the protection area are prohibited but visiting such as trekking and eco tour is permitted.

- Mount Popa National Park: it is located in Nyaung-U District. Its area is 49.63sq.miles.
 Special fauna and flora of semi-arid area inhabit it.
- Mount Victoria National Park: it is the second highest mountain in Myanmar with 3,053mheight. It covers a total area of 292sq.miles. Varied fauna especially unique birds can be seen. The mountain is located in Mindat District however Nyaung-U takes the role of gateway for eco-tourists.
- Zee O Forest: it is located in Nyaung-U District. Occupying an area of 0.06sq.mile. This
 forest is not prohibited from the general public however the villagers protect it themselves
 because they believe the spirits of Nat remains there. MoECAF cooperates with the
 villagers to protect the village by means of making fences and signboards.

CHAPTER 2 CURRENT STATUS OF TOURISM IN BAGAN

This chapter makes analysis on current situations on tourism in Bagan from administration, infrastructure and human resource development points of view.

2.1 Current Bagan Tourism

2.1.1 Foreign Tourists in Myanmar Democratization

Tourists visiting Myanmar have increased. According to the tourism statistics of the MoHT, the number of foreign tourists increased to 2.04 million persons in 2013, compared to 1.06 million persons in 2012 and from 760 thousands persons in 2009 after democratization of the state. (see Figure 2.1). This figure of 2.04 million foreign tourists includes 1.14 million "Border Tourists" who stay for one day in Myanmar. Approximately 900 thousand foreign tourists except for the border tourists seem to be those who are recorded by the Organization for Economic Co-operation and Development (OECD)¹

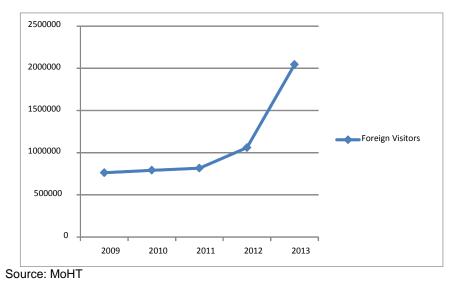


Figure 2.1 Trends of Foreign tourists in Myanmar

Next, Table 2.1 shows foreign tourists by country². The total number of foreign tourists was 900 thousand in 2013. Looking into the origin foreign tourists, approximately 70% are from mainly Asian countries and approximately 18% are from the western European countries. Therefore, foreign tourists from these two regions occupy approximately 88% of total foreign tourists. Analyzing foreign tourists by country, Thai tourists are the majority accounting for 140 thousand

¹ Definition of tourist by OECD is "Any person who travels to a country other than that in which s/he has his/her usual residence but outside his/her usual environment for a period not exceeding 12 months and whose main purpose of visit is other than the exercise of an activity remunerated from with the country visited, and who stay at least one night in a collective or private accommodation in the country visited."

² Foreign tourist includes business visitors according to the definition above.

persons³, followed by China (90 thousand persons), Japan (68 thousand persons), Korea (55 thousand persons) and the USA (54 thousand persons) respectively.

Table 2.1 Number of Tourists in Myanmar by Nationality in 2013

| Region | Country | Number | % |
|------------|-------------|---------|--------|
| Asia | - | 630,399 | 70.03 |
| | Thailand | 139,770 | 15.53 |
| | China | 90,550 | 10.06 |
| | Japan | 68,761 | 7.64 |
| | Korea | 54,934 | 6.11 |
| | Malaysia | 39,758 | 4.41 |
| | Singapore | 39,140 | 4.35 |
| | Taiwan | 30,699 | 3.41 |
| | India | 21,042 | 2.34 |
| | Hong Kong | 7,874 | 0.87 |
| | Bangladesh | 1,981 | 0.21 |
| | Others | 135,890 | 15.11 |
| West Euro | pe | 158,163 | 17.57 |
| | France | 35,462 | 3.94 |
| | U.K. | 33,203 | 3.69 |
| | Germany | 27,712 | 3.07 |
| | Italy | 11,728 | 1.31 |
| | Switzerland | 9,547 | 1.06 |
| | Belgium | 5,946 | 0.66 |
| | Spain | 5,588 | 0.62 |
| | Austria | 3,959 | 0.44 |
| | Others | 25,018 | 2.78 |
| North Ame | rica | 62,628 | 6.96 |
| | U.S.A | 53,653 | 5.95 |
| | Canada | 8,975 | 1.01 |
| Oceania | · | 28,079 | 3.12 |
| | Australia | 24,718 | 2.75 |
| | New Zealand | 3,318 | 0.37 |
| | Others | 43 | 0.00 |
| East Europ | ре | 10,183 | 1.31 |
| | Russia | 4,117 | 0.46 |
| | Others | 6,066 | 0.67 |
| Other Ame | rica | 4,625 | 0.51 |
| Middle Eas | st | 3,396 | 0.37 |
| Africa | | 2,688 | 0.31 |
| Total | | 900,161 | 100.00 |

Source: Myanmar Tourism Statistics 2013

Each country has different characteristics on average length of stay, pattern and itinerary of tour., The following show typical patterns of tour among Japanese, European and Thai tourists.

(1) Japan

Most of the Japanese tourists coming to Myanmar have a strong background working in Japanese companies and come for business, and the share of leisure travel is still low.

³ Thai Tourists includes border travelers who take one day trip between Thailand and Myanmar. It may be necessary to pay careful attention on the characteristics for making comparative Analysis.

However, from the interview it seems that many travel agencies expect that tourists with leisure intentions will grow in the future. The recent behavioral pattern⁴ is a one week tour that is as follows; one night in Yangon, one night in Bagan, one night in Mandalay, and one night at Inle Lake, and generally tour-groups take this four-night-and-five-day kind of tour. In Bagan, the combination of the temple ruins trip and the sunset-sunrise trip which take one night and two days is a main package. The pattern of taking 2 nights and 3 days in which a suburb tour to places such as Taung Kalat at the foot of Mount Popa is included has gradually been increasing.

(2) Thailand

For the tourists in the Thai market, because of the convenience of about an hour's travel from Bangkok to Yangon and the increase of flights, the number of tourists is tending to increase. There are two major patterns of tour, one is a three-night and 4-day tour including Yangon, Bago, and Kyaiktiyo (Golden Rock), and the other one is a four-night and five-day tour including Yangon, Bagan, Mandalay, and Inle. The most popular scenic spot attracting most tourists is Kyaiktiyo (Golden Rock), the second is Bagan. The pilgrimage on Buddhist site has a strong influence on this. Tourists concentrate on the Songkran festival in April and the early May holidays in Thailand.⁵

(3) Countries in Europe and the U.S.A

The characteristics of the tourists in the European and the U.S.A market, is the length of stay and the high share of independent tourists. For German tourists, the share based on the number of people taking group tours through travel companies⁶ and staying for an average of 12 to 13 days is 20%, and the share of the independent tourists staying for about 30 days is a surprising 80%. The behavioral pattern for independent tourists is to stay in Yangon, Bagan, Mandalay, and Inle for about 20 days and then for 10 days at a beach resort. Among them, there are those that have stayed only at the beach for nearly three months. Group Tour groups often stay in Bagan for three nights and four days, and the major behavioral pattern is to go to the major monuments, sunset-sunrise viewing, as well as the sunset cruise of Ayeyarwady River, and a one-day excursion around Mount Popa and Sally. A stop in the village on the way to spend about 1 hour on home visiting and exchanges is also popular. In addition to this, people also do things like relaxing at resort hotels.

2.1.2 Foreign Tourists in Bagan

(1) Number of Foreign Tourists in Bagan

In 2013, the number of foreign visitors to Bagan was about 200,000, and domestic around 55,000. Particularly in recent years, foreign visitors have dramatically increased except for 2009 due to strong cyclones that occurred in May 2008.

⁴ Referred to itineraries of Myanmar in brochures of major tour operators in Japan (JTB, HIS, Kinki Nippon Tourist, Nippon Travel Agency, Hankyu Express, etc.)

⁵ By interviewing with WIDE VIEW TRAVEL TOURS (specialist in Thai) May 08, 2014

⁶ By interviewing with UNITEAM TOURS & TRAVELS (specialist in German) May 08,2014

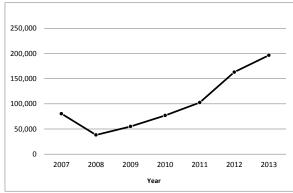


Figure 2.2 Number of Foreign Tourists to Bagan

Table 2.2 Number of Foreign Visitor and Growth Rate from 2007 to 2013

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|-------------------------------|--------|--------|--------|--------|---------|---------|---------|
| Number of Foreign Visitors | 80,410 | 38,135 | 55,061 | 76,831 | 102,587 | 162,984 | 196,365 |
| Growth Rate | | -53% | 44% | 40% | 34% | 59% | 20% |

Source: MoHT Bagan Branch

All foreign tourists visiting Bagan need to pay an Entry Fee (USD 15 for 5days) at major gateways such as airport, river port and toll gates. 60% of the foreign tourists came by air, 20% by land and the rest by water⁷. In high season, there were 19 to 24 flights a day to and from Nyaung-U Airport in 2014. On the other hand, in low seasons there were only about 7 flights a day in 2014. In addition to this, about 55% of the tourists coming to Bagan are in a package-tour, the rest are independent tourists including backpackers. The average time of stay for the tourists is relatively short, about 3 days and 2 nights.

MoHT Bagan Branch collects the number of lodgers and their nationalities from licensed hotels (refer to Table 2.6). Since tourism is a dominant industry in Bagan, the type of foreign visitors can be categorized as tourists rather than businessmen.

(2) Monthly Fluctuation of Tourists

The monthly range of foreign visitors between high and low season⁸ was about 6 times. The following table shows monthly number of visitors (Foreign & Domestic) in 2011, 2012 and 2013 and it shows June as the lowest and November to March as the high season.

⁷ Source from MoHT Bagan Branch. The number of visitor to Bagan is based upon the number of lodgers which MoHT Bagan Branch collects the monthly data from licensed hotels in Bagan. Therefore there are difference between the number of visitor who paid for the entry ticket and the reported number.

⁸ High season is from October to March, and low season is from April to September.

Table 2.3 Monthly Number of Visitors to Bagan from 2011 to 2013

| No | Month | 20 |)11 | 20 |)12 | 2013 | | |
|-------|-----------|----------|---------|----------|---------|----------|---------|--|
| No | Month | Domestic | Foreign | Domestic | Foreign | Domestic | Foreign | |
| 1 | January | 4,389 | 13,237 | 5,183 | 19,999 | 5,450 | 28,083 | |
| 2 | February | 2,366 | 13,939 | 3,360 | 19,231 | 4,421 | 29,109 | |
| 3 | March | 2,921 | 10,042 | 4,423 | 15,621 | 4,979 | 22,550 | |
| 4 | April | 6,602 | 4,760 | 6,459 | 7,751 | 6,878 | 9,272 | |
| 5 | May | 2,564 | 3,372 | 2,366 | 4,745 | 2,756 | 6,495 | |
| 6 | June | 2,176 | 2,262 | 2,851 | 3,649 | 2,820 | 4,570 | |
| 7 | July | 3,276 | 4,210 | 2,747 | 6,504 | 4,373 | 7,519 | |
| 8 | August | 2,385 | 6,349 | 3,254 | 9,691 | 2,838 | 10,161 | |
| 9 | September | 2,684 | 3,723 | 3,190 | 6,524 | 4,153 | 7,353 | |
| 10 | October | 4,489 | 9,459 | 4,884 | 16,565 | 5,329 | 17,574 | |
| 11 | November | 5,354 | 16,101 | 4,501 | 27,732 | 4,523 | 28,110 | |
| 12 | December | 6,659 | 15,133 | 6,409 | 24,972 | 6,353 | 25,569 | |
| Total | | 45,865 | 102,587 | 49,627 | 162,984 | 54,873 | 196,365 | |

(3) Foreign Tourists by Country

In terms of nationality, tourists from France visited that visited Bagan accounted for 12.2%, Germany 8.5%, UK 5.2%, and USA 7.2%. Compared to the proportion of foreign tourists in the whole country, France accounted for 3.9%, German 3.1%, UK 3.7% and USA 6.0%. From this data, it can be stated that Buddhist ruins attracted Western Europe and Northern American tourists.

Table 2.4 Foreign Tourists in Bagan by Nationality

| Country | 20 | 08 | 20 | 009 | 20 |)10 | 20 | 11 | 20 | 12 | 20 | 13 |
|---------------|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| America | | | | | | | | | | | | |
| Canada | 542 | 1.4% | 818 | 1.5% | 765 | 1.0% | 1,402 | 1.4% | 2,606 | 1.6% | 3,236 | 1.6% |
| America | 2,493 | 6.5% | 3,712 | 6.7% | 4,230 | 5.5% | 6,121 | 6.0% | 12,268 | 7.5% | 14,126 | 7.2% |
| Latin America | 42 | 0.1% | 111 | 0.2% | 258 | 0.3% | 121 | 0.1% | 206 | 0.1% | 321 | 0.2% |
| Other | 683 | 1.8% | 522 | 0.9% | 626 | 0.8% | 693 | 0.7% | 1,814 | 1.1% | 2,524 | 1.3% |
| West Europe | | | | | | | | | | | | |
| Austria | 590 | 1.5% | 1,379 | 2.5% | 1,213 | 1.6% | 2,407 | 2.4% | 4,034 | 2.5% | 3,217 | 1.6% |
| Belgium | 812 | 2.1% | 903 | 1.6% | 1,198 | 1.6% | 2,198 | 2.1% | 2,775 | 1.7% | 2,714 | 1.4% |
| Denmark | 216 | 0.6% | 317 | 0.6% | 661 | 0.9% | 638 | 0.6% | 2,711 | 1.7% | 2,586 | 1.3% |
| France | 4,736 | 12.4% | 7,251 | 13.2% | 8,380 | 10.9% | 13,389 | 13.1% | 24,427 | 15.0% | 23,931 | 12.2% |
| Germany | 5,189 | 13.6% | 6,245 | 11.3% | 7,314 | 9.5% | 10,679 | 10.4% | 14,334 | 8.8% | 16,737 | 8.5% |
| Italy | 2,179 | 5.7% | 5,087 | 9.2% | 7,447 | 9.7% | 7,341 | 7.2% | 7,660 | 4.7% | 9,685 | 4.9% |
| Sweden | 595 | 1.6% | 202 | 0.4% | 388 | 0.5% | 443 | 0.4% | 1,115 | 0.7% | 2,134 | 1.1% |
| Switzerland | 823 | 2.2% | 1,396 | 2.5% | 1,726 | 2.2% | 2,764 | 2.7% | 3,294 | 2.0% | 3,966 | 2.0% |
| Netherland | 568 | 1.5% | 566 | 1.0% | 1,029 | 1.3% | 1,538 | 1.5% | 2,749 | 1.7% | 3,755 | 1.9% |
| U.K. | 975 | 2.6% | 812 | 1.5% | 1,839 | 2.4% | 1,754 | 1.7% | 5,657 | 3.5% | 10,166 | 5.2% |
| Spain | 1,847 | 4.8% | 4,138 | 7.5% | 5,212 | 6.8% | 6,197 | 6.1% | 6,501 | 4.0% | 4,653 | 2.4% |
| Other | 3,397 | 8.9% | 3,834 | 7.0% | 7,726 | 10.1% | 8,269 | 8.1% | 18,711 | 11.5% | 19,727 | 10.0% |
| East Europe | | | | | | | | | | | | |
| Russia | 541 | 1.4% | 897 | 1.6% | 1,403 | 1.8% | 1,644 | 1.6% | 1,733 | 1.1% | 1,440 | 0.7% |
| Other | 426 | 1.1% | 331 | 0.6% | 758 | 1.0% | 452 | 0.4% | 1,173 | 0.7% | 2,594 | 1.3% |

| Country | 20 | 008 | 20 | 009 | 20 |)10 | 20 | 11 | 20 | 12 | 20 | 13 |
|-------------|--------|--------|--------|--------|--------|--------|---------|--------|---------|--------|---------|--------|
| Middle East | | | | | | | | | | | | |
| Israel | 315 | 0.8% | 613 | 1.1% | 902 | 1.2% | 1,044 | 1.0% | 1,405 | 0.9% | 1,093 | 0.6% |
| Other | 277 | 0.7% | 186 | 0.3% | 366 | 0.5% | 192 | 0.2% | 795 | 0.5% | 1,703 | 0.9% |
| Asia | | | | | | | | | | | | |
| South Korea | 1,419 | 3.7% | 1,893 | 3.4% | 3,062 | 4.0% | 4,709 | 4.6% | 6,324 | 3.9% | 8,719 | 4.4% |
| China | 1,229 | 3.2% | 2,086 | 3.8% | 3,080 | 4.0% | 4,881 | 4.8% | 7,345 | 4.5% | 11,733 | 6.0% |
| Taiwan | 146 | 0.4% | 136 | 0.2% | 321 | 0.4% | 207 | 0.2% | 465 | 0.3% | 900 | 0.5% |
| Hong Kong | 114 | 0.3% | 77 | 0.1% | 148 | 0.2% | 180 | 0.2% | 370 | 0.2% | 373 | 0.2% |
| Japan | 1,642 | 4.3% | 2,594 | 4.7% | 3,045 | 4.0% | 4,803 | 4.7% | 7,734 | 4.7% | 9,711 | 4.9% |
| Malaysia | 273 | 0.7% | 306 | 0.6% | 952 | 1.2% | 2,113 | 2.1% | 2,194 | 1.3% | 2,000 | 1.0% |
| Singapore | 519 | 1.4% | 621 | 1.1% | 632 | 0.8% | 1,303 | 1.3% | 1,334 | 0.8% | 2,328 | 1.2% |
| Thailand | 2,106 | 5.5% | 5,294 | 9.6% | 7,422 | 9.7% | 6,604 | 6.5% | 9,457 | 5.8% | 10,162 | 5.2% |
| Other | 2,565 | 6.7% | 1,664 | 3.0% | 3,212 | 4.2% | 6,168 | 6.0% | 7,771 | 4.8% | 13,405 | 6.8% |
| Oceania | | | | | | | | | | | | |
| Australia | 688 | 1.8% | 855 | 1.6% | 1,268 | 1.7% | 1,702 | 1.7% | 3,233 | 2.0% | 5,665 | 2.9% |
| New Zealand | 188 | 0.5% | 215 | 0.4% | 248 | 0.3% | 431 | 0.4% | 789 | 0.5% | 1,061 | 0.5% |
| Total | 38,135 | 100.0% | 55,061 | 100.0% | 76,831 | 100.0% | 102,387 | 100.0% | 162,984 | 100.0% | 196,365 | 100.0% |

On the contrary, observation of tourists from Japan and Thailand, the proportion showed different trends from the above. Japanese and Thai tourists who visited Bagan accounted for both 4.9 only %, while to Myanmar 7.6% and 15.5% in 2013.

In terms of monthly data, there are large gaps between high and low seasons as explained above. However looking at the composition of nationalities, the number of tourists from Thailand seems to be flat throughout the year. Furthermore, Japanese tourists visited Bagan during the low season such as April, May, August and September because of the long holidays and vacation seasons in Japan.

Table 2.5 Monthly Foreign Tourists in Bagan by Nationality in 2013

| Country | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|---------------|-------|-------|-------|-------|-------|------|------|-------|------|-------|-------|-------|--------|
| America | | | | | | | | | | | | | |
| Canada | 494 | 1,098 | 472 | 88 | 52 | 85 | 91 | 114 | 135 | 152 | 272 | 188 | 3,241 |
| Cariaua | 15.2% | 33.9% | 14.6% | 2.7% | 1.6% | 2.6% | 2.8% | 3.5% | 4.2% | 4.7% | 8.4% | 5.8% | 100.0% |
| Amorico | 2,253 | 2,541 | 1,975 | 521 | 408 | 699 | 702 | 486 | 371 | 865 | 2,189 | 1,116 | 14,126 |
| America | 15.9% | 18.0% | 14.0% | 3.7% | 2.9% | 4.9% | 5.0% | 3.4% | 2.6% | 6.1% | 15.5% | 7.9% | 100.0% |
| Latin America | 39 | 53 | 12 | 8 | 32 | 11 | 8 | 25 | 31 | 41 | 36 | 25 | 321 |
| Latin America | 12.1% | 16.5% | 3.7% | 2.5% | 10.0% | 3.4% | 2.5% | 7.8% | 9.7% | 12.8% | 11.2% | 7.8% | 100.0% |
| Othor | 397 | 260 | 374 | 50 | 83 | 65 | 86 | 76 | 84 | 230 | 518 | 301 | 2,524 |
| Other | 15.7% | 10.3% | 14.8% | 2.0% | 3.3% | 2.6% | 3.4% | 3.0% | 3.3% | 9.1% | 20.5% | 11.9% | 100.0% |
| West Europe | | | | | | | | | | | | | |
| Austria | 531 | 643 | 378 | 198 | 80 | 59 | 42 | 86 | 128 | 362 | 498 | 212 | 3,217 |
| Austria | 16.5% | 20.0% | 11.8% | 6.2% | 2.5% | 1.8% | 1.3% | 2.7% | 4.0% | 11.3% | 15.5% | 6.6% | 100.0% |
| Polaium | 410 | 433 | 325 | 105 | 28 | 41 | 57 | 108 | 97 | 198 | 520 | 392 | 2,714 |
| Belgium | 15.1% | 16.0% | 12.0% | 3.9% | 1.0% | 1.5% | 2.1% | 4.0% | 3.6% | 7.3% | 19.2% | 14.4% | 100.0% |
| Denmark | 239 | 273 | 253 | 62 | 21 | 24 | 31 | 48 | 92 | 234 | 749 | 560 | 2,586 |
| Denmark | 9.2% | 10.6% | 9.8% | 2.4% | 0.8% | 0.9% | 1.2% | 1.9% | 3.6% | 9.0% | 29.0% | 21.7% | 100.0% |
| Franco | 2,959 | 3,791 | 2,706 | 1,006 | 503 | 248 | 416 | 1,005 | 380 | 1,910 | 4,987 | 4,020 | 23,931 |
| France | 12.4% | 15.8% | 11.3% | 4.2% | 2.1% | 1.0% | 1.7% | 4.2% | 1.6% | 8.0% | 20.8% | 16.8% | 100.0% |
| Cormony | 2,262 | 2,765 | 2,341 | 816 | 301 | 176 | 321 | 615 | 249 | 1,772 | 2,869 | 2,250 | 16,737 |
| Germany | 13.5% | 16.5% | 14.0% | 4.9% | 1.8% | 1.1% | 1.9% | 3.7% | 1.5% | 10.6% | 17.1% | 13.4% | 100.0% |

| Country | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|-------------|--------|-----------------|--------|---------------|-------|----------|-------|----------------|-------|---------|--------|--------|---------|
| | 1,882 | 1,911 | 1,341 | 619 | 90 | 91 | 206 | 749 | 134 | 286 | 1,563 | 813 | 9,685 |
| Italy | 19.4% | 19.7% | 13.8% | 6.4% | 0.9% | 0.9% | 2.1% | 7.7% | 1.4% | 3.0% | 16.1% | 8.4% | 100.0% |
| | 284 | 569 | 405 | 100 | 45 | 21 | 18 | 51 | 18 | 120 | 391 | 112 | 2,134 |
| Sweden | 13.3% | 26.7% | 19.0% | 4.7% | 2.1% | 1.0% | 0.8% | 2.4% | 0.8% | 5.6% | 18.3% | 5.2% | 100.0% |
| | 671 | 727 | 582 | 122 | 91 | 59 | 63 | 107 | 79 | 412 | 697 | 356 | 3,966 |
| Switzerland | 16.9% | 18.3% | 14.7% | 3.1% | 2.3% | 1.5% | 1.6% | 2.7% | 2.0% | 10.4% | 17.6% | 9.0% | 100.0% |
| | 628 | 606 | 268 | 163 | 147 | 98 | 142 | 321 | 126 | 386 | 452 | 418 | 3,755 |
| Netherland | 16.7% | 16.1% | 7.1% | 4.3% | 3.9% | 2.6% | 3.8% | 8.5% | 3.4% | 10.3% | 12.0% | 11.1% | 100.0% |
| | 1,076 | 1,954 | 1,172 | 505 | 214 | 203 | 367 | 437 | 265 | 859 | 2,080 | 1,034 | 10,166 |
| U.K. | 10.6% | 19.2% | 11.5% | 5.0% | 2.1% | 2.0% | 3.6% | 4.3% | 2.6% | 8.4% | 20.5% | 10.2% | 100.0% |
| Oi | 340 | 280 | 204 | 192 | 121 | 159 | 403 | 594 | 294 | 967 | 710 | 389 | 4,653 |
| Spain | 7.3% | 6.0% | 4.4% | 4.1% | 2.6% | 3.4% | 8.7% | 12.8% | 6.3% | 20.8% | 15.3% | 8.4% | 100.0% |
| Oth | 3,604 | 2,272 | 1,937 | 981 | 828 | 231 | 826 | 890 | 772 | 1,625 | 1,898 | 3,863 | 19,727 |
| Other | 18.3% | 11.5% | 9.8% | 5.0% | 4.2% | 1.2% | 4.2% | 4.5% | 3.9% | 8.2% | 9.6% | 19.6% | 100.0% |
| East Europe | | | | | | | | | | | | | |
| Puecia | 244 | 322 | 165 | 82 | 44 | 16 | 21 | 29 | 25 | 94 | 192 | 206 | 1,440 |
| Russia | 16.9% | 22.4% | 11.5% | 5.7% | 3.1% | 1.1% | 1.5% | 2.0% | 1.7% | 6.5% | 13.3% | 14.3% | 100.0% |
| Other | 119 | 465 | 321 | 121 | 43 | 26 | 34 | 332 | 55 | 312 | 374 | 392 | 2,594 |
| Other | 4.6% | 17.9% | 12.4% | 4.7% | 1.7% | 1.0% | 1.3% | 12.8% | 2.1% | 12.0% | 14.4% | 15.1% | 100.0% |
| Middle East | | | | | | | | | | | | | |
| Israel | 69 | 173 | 68 | 54 | 12 | 27 | 33 | 31 | 77 | 87 | 276 | 186 | 1,093 |
| | 6.3% | 15.8% | 6.2% | 4.9% | 1.1% | 2.5% | 3.0% | 2.8% | 7.0% | 8.0% | 25.3% | 17.0% | 100.0% |
| Other | 211 | 297 | 216 | 86 | 34 | 20 | 24 | 45 | 89 | 136 | 237 | 308 | 1,703 |
| Other | 12.4% | 17.4% | 12.7% | 5.0% | 2.0% | 1.2% | 1.4% | 2.6% | 5.2% | 8.0% | 13.9% | 18.1% | 100.0% |
| Asia | | , | r | | ····· | | | T | | | T | г | |
| South Korea | 1,972 | 916 | 932 | 705 | 298 | 227 | 518 | 387 | 334 | 916 | 618 | 896 | 8,719 |
| | 22.6% | 10.5% | 10.7% | 8.1% | 3.4% | 2.6% | 5.9% | 4.4% | 3.8% | 10.5% | 7.1% | 10.3% | 100.0% |
| China | 1,448 | 1,848 | 1,243 | 1,020 | 411 | 578 | 769 | 408 | 567 | 1,186 | 972 | 1,283 | 11,733 |
| | 12.3% | 15.8% | 10.6% | 8.7% | 3.5% | 4.9% | 6.6% | 3.5% | 4.8% | 10.1% | 8.3% | 10.9% | 100.0% |
| Taiwan | 148 | 186 | 134 | 11 | 5 | 34 | 28 | 38 | 60 | 75 | 97 | 84 | 900 |
| | 16.4% | 20.7% | 14.9% | 1.2% | 0.6% | 3.8% | 3.1% | 4.2% | 6.7% | 8.3% | 10.8% | 9.3% | 100.0% |
| Hong Kong | 51 | 81 | 32 | 8 | 7 | 7 | 14 | 15 | 12 | 34 | 64 | 48 | 373 |
| | 13.7% | 21.7% | 8.6% | 2.1% | 1.9% | 1.9% | 3.8% | 4.0% | 3.2% | 9.1% | 17.2% | 12.9% | 100.0% |
| Japan | 926 | 1,317 | 1,320 | 902 | 457 | 173 | 376 | 848 | 904 | 819 | 806 | 863 | 9,711 |
| | 9.5% | 13.6% | 13.6% | 9.3% | 4.7% | 1.8% | 3.9% | 8.7% | 9.3% | 8.4% | 8.3% | 8.9% | 100.0% |
| Malaysia | 186 | 136 | 94 | 31 | 92 | 123 | 78 | 95 | 129 | 152 | 410 | 471 | 1,997 |
| | 9.3% | 6.8% | 4.7% | 1.6% | 4.6% | 6.2% | 3.9% | 4.8% | 6.5% | 7.6% | 20.5% | 23.6% | 100.0% |
| Singapore | 131 | 277 | 251 | 76 | 89 | 94 | 81 | 148 | 118 | 113 | 270 | 680 | 2,328 |
| | 5.6% | 11.9% | 10.8% | 3.3% | 3.8% | 4.0% | 3.5% | 6.4% | 5.1% | 4.9% | 11.6% | 29.2% | 100.0% |
| Thailand | 1,001 | 1,337 | 1,230 | 124 | 816 | 542 | 712 | 951 | 546 | 921 | 973 | 1,007 | 10,160 |
| | 9.9% | 13.2% | 12.1% | 1.2% | 8.0% | 5.3% | 7.0% | 9.4% | 5.4% | 9.1% | 9.6% | 9.9% | 100.0% |
| Other | 2,571 | 808 | 1,208 | 289 | 924 | 167 | 633 | 871 | 855 | 1,573 | 1,465 | 2,041 | 13,405 |
| | 19.2% | 6.0% | 9.0% | 2.2% | 6.9% | 1.2% | 4.7% | 6.5% | 6.4% | 11.7% | 10.9% | 15.2% | 100.0% |
| Oceania | r | 1 | [| г | r | Г | | T | | Г | Т | гг | |
| Australia | 881 | 675 | 509 | 203 | 182 | 225 | 362 | 202 | 290 | 679 | 676 | 781 | 5,665 |
| | 15.6% | 11.9% | 9.0% | 3.6% | 3.2% | 4.0% | 6.4% | 3.6% | 5.1% | 12.0% | 11.9% | 13.8% | 100.0% |
| New Zealand | 56 | 93 | 82 | 24 | 37 | 41 | 57 | 49 | 37 | 58 | 251 | 274 | 1,059 |
| | 5.3% | 8.8% | 7.7% | 2.3% | 3.5% | 3.9% | 5.4% | 4.6% | 3.5% | 5.5% | 23.7% | 25.9% | 100.0% |
| | 0.070 | | L | | | , | | | | | | - | |
| Total | 28,087 | 29,112 14.8% | 22,553 | 9,273 4.7% | 6,496 | 4,571 | 7,520 | 10,163 5.2% | 7,354 | 17,577 | 28,114 | 25,573 | 196,393 |

2.2 Tourism Administration

Tourism Administration of Bagan is analyzed from the following 7 aspects.

- · Heritage conservation
- Landscape and development control
- · Tourism resource and products
- Tourism promotion
- · Tourism businesses
- Tourism related services
- Organization and institution regarding tourism

2.2.1 Heritage Conservation

(1) Conditions of Monuments

Presently, there are 3,122 monuments (heritages) within the area of 80 km2 in Bagan⁹. Concerning the brick monuments in Bagan, many smaller monuments are found to be crumbling but larger monuments are stable generally. In spite visual observation the ground seems to be solid due to lack of uneven settling that causes tilting from the base. But no survey and monitoring on the ground structure have been performed.

The issues that were found in the current situation are the crumbling of the vault structure used in the corridor and entrance as well as the falling of stucco on the inner and outer walls of monuments. Moreover, as for seemingly sound monuments that were found with cracks on walls and subsidence of ground due to the expansion and weathering of the material by rainwater erosion and salt weathering due to the phenomenon in which residual rain water in the ground can be sucked up with salt. ¹⁰ Concerning the crumbling of the vault structure, some monuments have been reinforced but the same measures have not been applied to others. And concerning the falling of stucco, the National Research Institute for Cultural Properties, Tokyo (hereinafter referred to as TOBUNKEN) and International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) are now in the process of soliciting for support including human resources.

⁹ "Overview of Bagan and current conservation and management challenges", Mr. Thein Lwin (Deputy Director General, the Department of Archaeology), International Expert Workshop on Bagan Inventory System, 9-10 June 2014, Bagan Archaeological Museum

¹⁰ "Technical report for cultural heritage protection in Myanmar", Independent Administrative Institution, National Research Institute for Cultural Properties, Tokyo, March 2013 p39

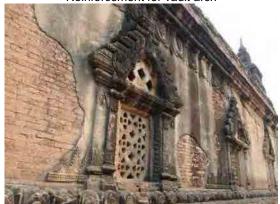




Reinforcement for vault arch



Falling of stucco on vault arch



Falling of stucco on outer wall

(2) Conservation and Restoration of Monuments

Bagan archaeological area and monuments are registered and managed by the Department of Archaeology and National Museum, Ministry of Culture (hereinafter referred to as the Department of Archaeology). The authority divided the Archaeological Zone into 11 zones to manage Bagan. There are around 200-300 ancient monuments in each zone and 3,122 in total as above mentioned. Five engineers from the Department of Archaeology, Ministry of Culture patrol and carry out the conservation activities in all of the zones.

Any excavation surveys have been stopped due to the lack of personnel and budget within the jurisdiction of the Department Bagan branch. Recently the Department has been engaged in small but highly urgent activities for conservation and restoration as well as on the grading of the monuments, which is hereinafter described. For example, now they execute bank protection work on the Irrawaddy River at the bottom of 3 temples (136,146,1158¹¹) in Bagan Archaeological Zone where the risks of bank erosion are encountered.

The information regarding damage is provided by people outside of the Ministry of Culture, such as tour guides and shopkeepers of temporary stores near the monuments.

¹¹The number of inventory which includes 2,837 ancient monuments and antiquities put by Pierre Pichard, "Inventory of Monuments at Pagan", KISCADALE EFEO UNESCO,1994-2001



Bank protection work on the Irrawaddy River 1

Bank protection work on the Irrawaddy River 2

On the other hand, a group of parishioners called Gopaka, has maintained 14 monuments. Some foreign experts are of the opinion that the very Buddhism culture that has been passed on over generations is what Bagan is all about. The Department of Archaeology now provides special regulations on maintenance activities even for Gopaka. Alternatively, both Gopaka and the Department of Archaeology can each have its own regulation for temporary storage in the temples for souvenirs, etc. It is said that under the existing conditions Gopaka's regulation has an advantage over the Department's though there are contradictory clauses.

Concerning the past conservation and restoration, repairs, restoration and, in particular, "extension" of religious architectures have been done meritorious in Myanmar, which is a devout Buddhist country. Foreign experts pointed out the problem that restoration activities by personal donors had not been accurate conservation from a cultural point of view and added some modifications beautify and provide an aesthetic sense in each era. Therefore the Department of Archaeology has been banning all restoration activities by personal donors for temples, pagodas and others as monuments. In addition, the authority regulated the form and notation by which stone monuments inscribed the names of donators, which are erected on the sides of the temples and pagodas.

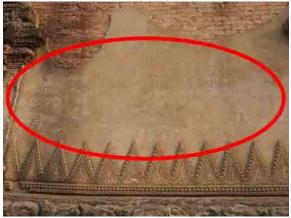
In the process of restoration, the inability to distinguish between original and new materials used in restoration has confused across the ages and it is next to impossible for tourists to distinguish the difference at a glance. And it is also alleged that many monuments were rebuilt in the late 1990s without the complete restoration. There is an opinion that these undermines the values of both culture and tourism resources. A contributory factor towards reduction of values is the insufficiency of recognition not only physically to preserve and repair the monument shape but also to preserve and carry on the construction methods and structure that enable to create the shape. So it is the tradition and cultural background from foundation to present of the monuments.

They don't have their own guidelines for the conservation and restoration in Bagan and Myanmar, and are using the ASI (Archaeological Survey of India)'s Conservation Manual made in 1923.

(3) Management of Monuments

Currently, the following people monitor the monuments; five engineers from the Department of

Archaeology, Ministry of Culture, a staff of about 60 totals from the security sector to watch the mural paintings and around 50 tourist police officers and Gopaka as people independent of the Ministry of Culture. The Department of Archaeology Bagan branch has cited the lack of human resources as a major issue. Basically staffs are not found at monuments except very popular ones and they are far from well-managed. So graffiti and litter have been found there at the sites of monuments. In spite of this, the investigation reveals that many of these are not due to foreign tourists but local people and domestic tourists.





Graffiti on stucco wall

Discarded empty bottle

Now four things (entrance with 1. socks, 2. shoes and entrance with skimpy clothes like 3. shorts, 4. camisole [written as a spaghetti blouse on the signboard]) are prohibited from a religious perspective and notification by signboards on monuments. The admittance is not controlled due to the increase of tourists, but some regulations are made, such as climbing to the upper layer, the use of incense and candle and photography in the monuments with valuable mural paintings. The prohibition of socks, shoes and shorts is easy to understand. But the prohibition of sleeveless shirts is difficult to do because it is written as "Spaghetti Blouse" on the signboard. It would be "Spaghetti strap blouse". But it is hard to know it means thin straps or sleeveless, or both. In addition, it is unclear for foreign tourists only with this indication whether a singlet usually called "Tank Top" and "Sleeveless" is prohibited or not.



Signboard notifying four prohibited matters at the monuments



Signboard prohibiting photography in the monuments with valuable mural paintings

Concerning the admission fee for foreign tourists (USD 15 for 5 days) to enter the Archaeological Zone, officials of the Department of Archaeology, Ministry of Culture collect them at the Nyaung-U Airport from any foreign person who enters by air, at two locations, Nyaung-U Jetty and Z-craft Jetty from persons using waterways and at the tollgates for visitors coming by land. The visitors are checked whether they are in possession of tickets only at Hti Lo Min Lo Temple and Shwe San Taw Temple. Visitors who didn't pay should pay at each temple. In addition the admission fees go to the national treasury.

(4) Grading of Monuments

The experts under UNESCO carried out grading of the monuments in Bagan as part of the Master Plan for the Preservation of the Historic Area of Bagan (phase I) (draft) which was prepared in 1990s with the UNESCO's support. 34 monuments in grade 1 which is the most important, 100 monuments in grade 2, 280 monuments in grade 3 and a total of 414 monuments have been elected. However, this grading is not based on purely archaeological value but takes into account the importance of the maintenance.

(5) Excavation Site of Royal Palace (Currently Dormant Excavation)

The excavation site of the Royal Palace is located at Old Bagan. However, excavation activity has been suspended due to lack of funds and human resources now. But, the site is open for visitors and it seems to be worth seeing since sidewalks, signboards are installed between the cover roofs and the excavation trenches and also its volume is huge. In addition from the point of view of conservation and restoration, acrylic for covering is applied to some high value excavated artefacts, such as pottery. The situation should be improved because it is not suitable as a method for preserving them.







Sidewalk and signboard at the excavation site

(6) Trend of the World Heritage in Myanmar

"Pyu Ancient Cities" was successfully listed as a World Heritage at the 38th session of the World Heritage Committee in 2014. It is the first World Heritage site in Myanmar, and the Ministry will nominate Bagan as the 2nd World Heritage site. The registration of Bagan on the list might become an important element to urge the tourism industry to develop in the future. However, in order to be registered on the list, due consideration of the "(prospective) World Heritage Criteria/ Outstanding Universal Value (OUV)", "integrity and /or authenticity" and

"protection and management" of the monuments and the landscape including the monuments is needed.

Under the existing conditions, it seems that the zoning (three zones) mentioned below (2.2.2 Regulation of Landscape and Development) is expected to be reconsidered for the World Heritage nomination. But it has not been decided yet as to how to reconsider the zoning because it is uncertain which option is preferred as target area between the following two.

- a. Target area for the World Heritage nomination as only a specific monument(s)
- b. Target area for the World Heritage nomination as the whole Bagan area

In the light of the above circumstances, projects such as design and implementation of an Integrated Management System (IMS) and capacity building regarding the monuments conservation are being conducted under UNESCO's initiative. UNESCO is essentially in a position of making recommendations and giving support, and as to how Bagan archaeological area and monuments should be registered as a World Heritage candidate. UNESCO will give its opinion whether to register as monuments, still existing religious practice and others including "Living Heritage" listed in criteria (vi), or only the old monuments as artifacts. Now UNESCO has proposed the idea to the government. On the other hand, UNESCO intends to overcome the current dilemma and promote conservation by registering as a World Heritage since it is concerned about inadequacy of protection and management due to lack of human resources and funds in the Ministry of Culture in Bagan. The radius and speed of expansion in urban centers, have shown development successfully slipping through the net of laws and regulations. So the authority is expectant of a positive response towards Bagan's nomination.

Pyu Ancient Cities, already listed as a World Heritage, was nominated and judged with evaluation of "ancient artifacts (brick walled and moated cities, palace citadels, burial grounds, manufacture sites and others)" and " water management features – some still in use". The process of nomination and registration, and management planning that was used of Pyu Ancient Cities would be helpful because some same situation is found between Pyu and Bagan.

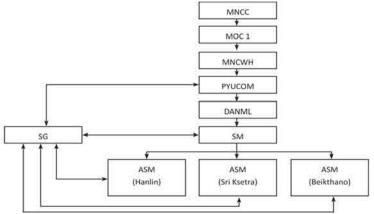
(7) Preparation for Registration of World Heritage

1) Current Activities

As part of the support on UNESCO's initiative mentioned above, the establishment of a support IMS toward the World Heritage registration has already been started from this year. The project duration is scheduled for a total of three years, two years for planning and one year for commissioning. UNESCO recommends a temporary halt of such large-scale construction projects for the three years until the completion of the IMS and a plan to eliminate the negative impacts on the monuments with sustainable technique for tourism infrastructure. Therefore enough cooperation with UNESCO and the Ministry of Culture is important during the implementation of the pilot project in this project.

2) Structure

When the Pyu Ancient Cities was nominated for World Heritage status, a collaborative framework was formed, involving the national committee to local communities as shown in the figure below. The Chairman of Myanmar National Culture Central Committee (MNCCC) was the Minister of Culture and members consisted of Minister in the President's Office (1), Vice Ministers of relevant ministries, Presidents of universities and others. The chairman of Pyu Ancient Cities Co-ordinating Committee (PYUCOM) was Deputy Minister of the Ministry of Culture and members were elected from the Department of Archaeology and GAD in the relevant regions. PYUCOM organized working groups from each site (there are three sites) as a lower organization, each chairman was an officer of each GAD of individual districts. Members were elected from site managers within the Department of Archaeology and the officers of related departments like GAD of Township.



Source; JSPS Core-to-Core Program (B.Asia-Africa Science Platform Program), Establishment of the Network for Safeguarding and Development of the Cultural Heritage in the Mekong Basin Countries, symposium

- MNCCC = Myanmar National Culture Central Committee
- MOC = Ministry of Culture
- MNCWH = Myanmar National Committee for World Heritages
- PYUCOM = Pyu Ancient Cities Co-ordinating Committee
- DANML = Department of Archaeology, National Museum and Library
- SG = Stakeholder Groups including Sangha and local communities
- SM = Site Manager
- ASM = Assistant Site Manager

Myanmar expert said as follows: Pyu Ancient Cities consisted of three sites and their level of regional development, especially as a tourist destination, is different from Bagan. Therefore, this organizational structure may not apply simply to Bagan but probably the similar organization will be formed.

(8) Sustainable Tourism Plan and World Heritage

The World Heritage Committee adopted "World Heritage and Sustainable Tourism Programme" led by World Heritage Centre, the steering group consisting of the state parties representing each region and World Tourism Organization (UNWTO) in 2011. The vision is to make World Heritage and tourism stakeholders share responsibility for conservation of our common cultural and natural heritage and for sustainable development. It is trying to integrate sustainable tourism principles into the mechanisms of the World Heritage Convention. Additionally as a part of the program, more specific indicators of the impacts of tourism and others are made in the three-year plan from 2013 to 2015, with a view to integration with the World Heritage Convention.

The following proposals, including the main contents of the program in 2011, should be particularly taken into consideration in this project, out of the proposals by UNESCO to develop the tourism industry sustainably. Underlined items are the more important parts because they are very critical for sustainable development of tourism in Bagan.

- <u>Urging more stakeholders to engage in the project at every stage of planning,</u> development, and management of sustainable tourism
- Making all stakeholders know and understand sustainable development to build consensus
- Training people in Bagan engaged in tourism related activities so that they can participate in the activities and receive benefits from tourism industry
- Making people in the areas have a sense of pride in the World Heritage site through a conservation education campaign
- Building the capacity of the site management to accommodate sustainable tourism
- Helping marketing these products through their promotion at the local, regional, country and international levels
- Using profits generated from tourism industry to supplement insufficient conservation and protection costs at the sites
- Spreading the lesson learned from other World Heritage sites and other protected areas
- Making people in tourism industry know the importance of protection of World Heritage
- Urging visitors to understand OUV of World Heritage and adopt responsible behaviors for the heritage

(9) Impact from Tourism

As described above, UNESCO is conducting research on specific impacts of tourism to the world heritage in its "World Heritage and Sustainable Tourism Programme". UNESCO already recognizes the basic positive and negative impacts from the tourism industry to cultural heritages in Bagan and puts forward the coexisting balance of tourism and conservation.

Now the following are precisely pointed out: Construction of the replica of Royal Palace, the golf course and size of the museum within the Archaeological Zone, widening of the road, extension work to the hotel near Old Bagan, extension to the south side of New Bagan among others. In addition, it has also been pointed out that tourists concentrate at some monuments during peak times (at the time of sunset viewing) in the high season and the large tourist buses drive through within close proximity of the monuments.

2.2.2 Regulations on Landscape and Development

The Department of Archaeology, Ministry of Culture has strong authority in Bagan because the Department has the responsibility to ensure the sustainability of monuments, and they are the most important resource for tourism in Bagan.

There are currently five valid State Laws on protection and preservation of monuments in Myanmar, and in addition specific regulations have also been established in the Bagan Archaeological Zone. Basically, all development activities related to monuments in Bagan area are regulated by the Department of Archaeology, Ministry of Culture and the activities should be approved by the authority.

Among the State Laws "The Protection and Preservation of Cultural Heritage Regions Law" established in 1998 provides the prior permission of application, review and approval on tourism and infrastructure development. The following items shall be relevant to the Department of Archaeology, assessed by the Ministry of Culture or the Department and then delivered. Prior permission from the Department is required under the Law:

- Within the Ancient Monument Zone or the Ancient Zone: (1)constructing or extending a building; (2)renovating the ancient monument or extending the boundary of its enclosure;
- Within the Protected and Preservation Zone, constructing, extending, renovating a hotel, motel, guest house, lodging house or industrial building or extending the boundary of its enclosure:
- Within the Archaeological Zone: (1)carrying out the renovation and maintenance work of
 the ancient monument without altering the original ancient form and structure of original
 ancient workmanship; (2)carrying out archaeological excavation; (3)building road,
 constructing bridge, irrigation canal and embankment or extending the same, (4)digging
 well, pond and fish-breeding pond or extending the same.

The application shall be scrutinized based on the following criteria:

1) whether it can cause obstruction of the view of the Archaeological Zone or not; 2) whether it is clear of the ancient monument or ancient site or not; 3) whether it can obstruct the surrounding natural landscape or not; 4) whether it can undermine the grandeur of the ancient monument or not; 5) whether it can affect the security of the monuments or not; and 6) whether it can cause environmental pollution or not.

And the "Enforcement Regulations in accordance with The Protection and Preservation of Cultural Heritage Regions Law" shows formats of the above applications. There are some differences in each building type, but the major contents are below:

- · Kind of building to construct/ extend/ measurement of the boundary to extend.
- Detailed measurement of the present situation of the building/ the boundary of its enclosure. (attachment of the photographs for east, west, left, right)
- The reason, for the building plan and duration of work expected to construct/ extend/ renovate. (mention definitively and attach drawings)
- Recommendation by relevant quarter or group of village and Township GAD.

The regulations unique to Bagan include the zones, and behavior regulations and individual objects like Gopaka in each zone. The zoning was drawn up in 1994 under the Township law and order (Township Law and Order Restoration Council for Pagan-Nyaung-Oo Township¹²) and then the Ministry of Culture certified (national designation) in 1999.

Here are three zones on monument.

 12 "MASTER PLAN FOR THE PRESERVATION OF THE HISTORIC AREA OF PAGAN (PHASE I) (DRAFT)", UNESCO, 1996, P.46

| Zone | Area (ha) | Overview | regulation |
|---------------------------------------|--------------|--|---|
| Ancient Monument Zone (MZ) | 2,610 | Zone for concentration of monument | In accordance with State Law, the regulation has 21 articles. It contains many restrictions against action of damaging the original landscape and applies to buildings such as shops, housing, hotels, motels, inns and factories, infrastructure, like ponds, wells, roads, sidewalks, parking lot and surrounding environment, such as trees, mountain and river. |
| Ancient Zone (AZ) | 3,140 | Zone for monument and mounds planned to excavate / Buffer zone for MZ | The regulation has a total of 13 articles. It is basically in accordance with the regulation of MZ, but restrictions on road construction and expansion of town, quarter and village have been removed. |
| Protected and Preservation (PZ) | 5,460 | Buffer zone | The regulation has 12 articles. It is basically in accordance with the regulation of AZ, but it excludes restrictions of plants and height of buildings and Hotel Zone, Industrial Zone and Economic Zone have been included. It represents the character of a buffer zone. |
| Total | 11,210 | - | - |

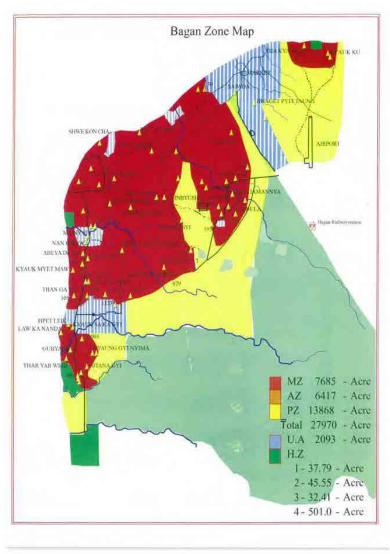
In addition, Hotel Zones for construction of hotels and Urban Zones as residential area are also set in Bagan. MoHT gives the approval of the development within the Hotel Zone, but permission from GAD of the District is needed for the approval. The Township Development Committee gives the approval of the development within the Urban Zone but permission from the GAD of the District and the Department of Archaeology, Ministry of Culture is needed for the approval.

With these regulations, regarding currently urban area expansion due to population growth, urban development has been well controlled is guided to east and south direction in Nyaung-U and to south direction in New Bagan in accordance with zoning regulations. But recently it is found that existing hotels are renovated without the permission. The Ministry of Culture has an opinion that it may cause deterioration of the landscape and create bad influence on monuments.

On the other hand, the landscape of Bagan seems to be well conserved by the regulation of development¹³. But the problems that the some exceptions (such as the golf course, the museum, the replica of Royal Palace and the viewing tower owned by private company) are found remain.

followed as below: (A) They shall take a distance at least 23 m 43.2 cm (90 ft) from ancient monuments. (B) They shall be smaller than/equal to 9 m 14.4 cm (30 ft) and smaller than/equal to two stories. (C) Basement shall not be allowed. (D) Buildings for any business and industry are not allowed.

Towns, quarters or villages in MZ shall not be extended. In addition new construction in MZ except for towns, quarters or villages shall not be allowed and it in towns, quarters or villages in MZ and all areas in AZ should be



Source: MoCul

Figure 2.3 Existing Zoning Map of Bagan¹⁴

2.2.3 Tourism Resources and Tourism Products

(1) Bagan Archaeological Area and Monuments

Bagan archaeological area is accounted not only "the land of Burmese heart¹⁵", but also "the most extensive archaeological site in south-eastern Asia and possibly among the few in the world".

Bagan has a castle wall which is thought to have been built in around 850AD/BC, but the city had been just one of the city-states that lasted till the end of 10th Century. Bagan became the capital of first Burmese unified nation that was formed by King Anawrahta. He extended his domination to the territories of Shan, Pyu and Mon by military conquest and then transformed nation's religion from Mahayana Buddhism to Theravada Buddhism. Bagan flourished as one

¹⁴The legend in the map is not correct. Rather, Red; MZ, Yellow; AZ, Light green; PZ, Vertical stripes; UZ, Dark green; HZ, the lightest green; Villages

of two major forces in south-eastern Asia, together with Khmer Angkor dynasty until the late 13th century. Inscriptions show more than 5,000 pagodas, temples and monasteries etc. existed at that time¹⁵.

The landscape with such a density of monuments is the best characteristic of Bagan, and one of a kind in the world. Moreover, some monuments are still now regarded as sacred for not only locals but also the most Burmese people. They can be called the still living Buddhism monuments.



Landscape of Bagan from terrace of heritage



Buddha Image at Arnanda Temple



Bupaya Pagoda from Sunset River Cruise

Bagan's main tourism resource is the ruins of temples. Sightseeing of the ruins of temples is not only chosen by many travel agencies as a product, independent travelers also take this as the major part of their trip, and focus on the relics landscape visit highlighted by sunset-sunrise views. It has no big difference compared to travel agencies' other products, which is a standardized travel course with poor negotiability and diversity. Therefore it is necessary to develop new tourism products.

Bagan is the signature of Myanmar and over half of the tourists that came to Myanmar had been to Bagan. The result is this promotion of Bagan was attraction of the number of tourists to Myanmar, and vice versa. In this regard, tourism promotion for Bagan largely effects on the

¹⁵ Ono Toru, *Nazo no Bukkyo Oukoku Pagan*. Tokyo: NHK Publishing, Inc., 2002.

overall tourism in Myanmar. Bagan is famous as having one of the world's three largest Buddhist temples, and it is necessary to think about how to make distinguishing Branding compared to other Buddhism heritages like Sukhothai and Ayutthaya in Thailand, Angkor Wat in Cambodia, and Borobudur in Indonesia from a unique perspective. Currently there are some travel agencies promoting it as "The Biggest Buddhism Site", which gives a hit of it.

(2) Tourism Products and Tour Program except for Heritage

Tourism in Bagan largely depends on heritages, however there are several tourism products except for the heritage sites which are so far not so well utilized at this moment.

1) Community-Based Tourist (CBT) and Eco-tourism

CBT can be defined to be the kind of tourism in which local tourism resources are attractively developed for local benefit. Eco-Tourism has many definitions, but in this case, it means that which utilizes and considers the natural environment. In Myanmar Eco-tourism is managed by Ministry of Environmental Conservation and Forestry (MoECAF).

As typical example of the CBT and Eco-Tourism in Bagan, there are villages surrounding the main road connecting the three main urban centers of the Bagan region – New Bagan, Old Bagan, and Nyaung-U – and others interlinked by smaller suburban roads that offer tourists a chance to enjoy traditional Burmese arts such as cotton textile manufacturing, cigar-making from palm sugar and corn, and palm &peanut oil extraction. The most popular village among them all from the center of Bagan is Min Nan Thu Village at a distance of half an hour by cart or 15 minutes by car. There are also tour programs designed for European and American tourists staying for extended periods of time which offer a chance for tourists to spend a few hours with villagers and their children at their homes in the form of a short homestay.

Mt. Popa and Sale are also famous site-seeing spots in the Bagan area. One-day Taung Kalat site-seeing pilgrimage tours in the cleft foothills of Mt. Popa are often available, offering tourists a rare chance to encircle the wooden Sale monasteries. The vicinity of Mt. Popa (1,518m) is home to a treasured trove of precious flora and fauna with a single resort hotel for travelers' convenience. Tourists can enjoy horseback riding or trekking while utilizing this hotel as their base.

However, Brochures and pamphlets featuring this one-day tour could not be found at any travel agency.



Distillation of Peanuts Oil



Taung Kalat, Popa Mountain



Trekking Route

2) Hot-air Balloon (Balloon over Bagan)

To enjoy sightseeing from the air, the tour programs with hot-air balloon are held every year during the high season from the beginning of October to the end of March, which it takes three hours door-to-door form the hotel including a champagne breakfast and flying hours for about 45 minutes to one hour. There are two options for fee by service: USD 320 and USD 380 per person (USD 330 and USD 390 from 20th December to 5th January). Two balloons with 12 person capacity to be comfortably used for 8 persons, one balloon with 12 person and seven balloons with 16 persons: ten balloons in total are operated at the early morning in order to avoid an ascending air.



Balloons take off from Shwe zi gon sports ground (overgrown grasses and weeds are not mown during off season)

The balloons take off from Shwe zi gon sports ground which is located in the west end of Nyaung-U Town and land on individual locations depending on the wind direction of the day. Thus, sometimes the balloon lands on the opposite side of shore or holm in the river or near the monuments. It does not allow for all due to expensive fees, but there are many opinions of high evaluation that was able to enjoy unforgettable experience.

(3) Tourism Facilities

In Bagan, sightseeing spots apart from relics and temples and the Archaeological Museums are listed below and each of them faces many issues.

1) Golden Palace

The Golden Palace which is a sort of replica of the golden shining palace during the Bagan dynasty, has little attractions. And it is required a separate entrance fee (USD 5) due to private management. There are currently few tourists vising the Golden Palace. in addition, there is also restaurant providing tea and other foods in the palace.

2) Archaeological Museum

Bagan was where the first (oldest) dynasty in Myanmar was established. Bagan was also one of centers of learning Buddhism philosophy and literature. Consequently, the archeological

museum has many valuable and attractive assets. Entrance fee is 5,000 Kyat for foreigner and free for Burmese. Assets are exhibited by category, but it seems less thematic impacts. Explanation of assets in English is normally simplified compared to Burmese. If the archaeological museum is to be considered as a genuine tourism product in Bagan, the display of artefacts should be improved upon such that layout of objects, quality of showcases, lighting systems, visitor's flow, security and 3D models are upgraded.

3) Bagan Viewing Tower

The Bagan Viewing Tower has a spectacular view and good position for overlooking the all the relics. It is a private facility managed by a hotel, and an entrance fee of USD 5 with a refreshing drink on the top floor is worth to pay.

4) Golf Course (Bagan Golf & Country Club: BGCC)

The Bagan Golf & Country Club was established in 1996 with the area of 208 acre which equivalent to 0.84 km² of land in the Ancient Monument Zone (MZ). The UNESCO pointed out the golf course has problem on conserving heritage in Bagan, when the Bagan applied the World Heritage in 1996.

The golf links spread out in a radial shape of 120 degrees around the club house is 7,073 yard long in total for 18 holes. This is a full-scale golf links with driving range, sand bunkers, over-stream-link, and well-maintained putting green. Therefore, it was nominated for one of the six tournament links for Myanmar Golf Tour in 2014. The tournament at BGCC will be held from October 16 to 19 in 2014 for four days. The green fee is USD 35 for 18 holes, USD 20 for rental of gears, USD 10 for caddie and USD 30 for electric cart.

There are 73 staff working in BGCC and 53 caddies out of all are concurrently working as maintenance staff such as weeding and watering. The lawn is kept in good conditions with running water from the river. The General Administration Department of Nyaung-U District is the owner of BGCC and outsourced to the Amazing Bagan Resort to operate and maintain BGCC together with the adjacent hotel. It has around 15 groups in off season and 25 groups in high season. Because BGCC is not selling the club membership, it is thought that the income from the hotel covers the maintenance costs of BGCC.



Access to the club house



Club House building



9th Hall (601 yards)



Golf link nearby the monument

There are 14 monuments and vast fruit plantations which are surrounded by barbed-wire fence.

Although there is a large conference room which is used for tourism-related meetings and trainings during off season, it needs to be improved against growing demand since there are no proper café and restaurant and not enough space for locker and shower rooms. It has possibility to be a new tourism facility based on the quality of golf links even though slightly cooler period of time is only allowed for play.

(4) Handicrafts to be Tourism Products

Let the souvenir article in Bagan best three be lacquer ware, sand painting, and antique from the interview to a guide etc. In addition, a Buddha statue, a mini puppet, etc. are popular as well. The average spending in a souvenir amounts to a little more than 100 dollars.

For Europeans and Americans, the above ones are attractive, though, for Asians not so much because these are quite common in their life.

1) Lacquer Ware

A typical handicraft in Bagan is Lacquer ware which has a long history and also well known among tourists. Lacquer ware in Bagan with vivid color and unique shape seems to be made with high technique. Especially, Lacquer ware covered with horse hairs, which is very light and soft, is very unique one. Many lacquer ware shops have observation course in their factory, which is one of tourism products in Bagan.

Bagan has a Lacquer ware Technology College under the ministry of Cooperative. This college has received technical assistance from Utsunomiya University of Japan for 10 years. The Utsunomiya University seconds few experts to the college once a year. ASEAN Center of Japan also invites the lacquer ware companies to the Lacquer ware Fair in Tokyo, where most lacquer ware from ASEAN members are exhibited all together in Tokyo. Through the fair, the companies get hints on the brush up techniques and products to improve on their competitiveness in the world market.

About 100 students study at the lacquer ware college however, all of them leave for Yangon or

Mandalay to join the university after their diploma. There are no students remaining in Bagan to work in the lacquer ware industry. Furthermore, young workers who had been trained for some years have moved to the city resulting in a shortage of well-trained workers.







Procedure of Making Lacquer Ware with Horse Hair



Lacquer Jag

2) Textile

Textile in Bagan is also popular among travelers, but something to typically differentiate it from other places in Myanmar is absent. The pattern of textile in Bagan is not different from others in Myanmar.

3) Sand Painting

Sand Paintings (particular the ones of temples providing protection against sunset and sunrise) vividly reminds many tourists of the scenery in Bagan. The price is reasonable even if it is not sold at fixed price and is handy to carry back to home, however, its quality depends on the technique of the painter.

The tracing directly onto the wall paintings of the temples used to make designs for Sand Painting which is now strictly prohibited. But the designs are still copied and utilized for the Paintings.

4) Antique

In Bagan, only three souvenir shops are permitted by the MoCul to sell the antiques. The all antiques are certified by the MoCul and some of them are quite valuable and expensive.

(5) Issues on New Tourism Products

Site-seeing in Bagan is mainly centered on the temple remains which are listed in guide books and included in guided tours. It is necessary to diversify 1-3-day walking courses around the remains to take advantage of the location's rich historical background.

Since comfortable lodgings are already scattered throughout the Bagan region, solo travelers who are limited by transportation tend to spend a lot of time in or around the area where they are staying. Clusters of restaurants or shops serving as landmarks for tourists and a vibrant night market serving as a familiar and safe location are needed to increase tourists' motivation to enjoy their stay.

Other industries, including lacquer ware and agriculture – such as palm sugar, sesame seeds, and beans – exists outside of the tourism industry in the Bagan region. However, there is not yet sufficient cooperation between these industries thus leaving a valuable opportunity for partnership untapped. Many industries have only gone as far as selling processed goods. There is an opportunity to increase sales through new product development and promotion. For example, hotels and restaurants can make use of traditional arts or promote famous cuisines made with local ingredients increasing sales of these products through the tourism industry.

Some traditional hotels in Bagan are still using the local textile for curtains, bed covers, pillows and so on. .It is expected that more will be produced and consumed locally. The lacquer ware of Bagan is now mainly exported to Thailand.

2.2.4 Tourism Marketing

(1) Diversification of Tourism Products and Increasing Length of Stay

As for site-seeing in Bagan, excluding the European market, where individual travel is mainstream, diversification is lacking and is limited to short period stays for group tours following a standard itinerary pattern of 2 days and 1 night. New tourism product development is usually carried out by industries related to tourism through marketing and product development departments. However, such entities, regrettably, only exist in Yangon. In order to solve this problem, it is necessary to promote the relocation of product development functions from the dispatch point near the market (Yangon) to the locally-rooted destination point (Bagan). In recent years, not only have companies, such as a Japanese-run travel agent company, begun to establish headquarters in Bagan, offering guides, vehicles, and emergency services, but entrepreneurs have also begun to trickle in, developing information transmission and local tourism products. Similar to the situation in neighboring countries, there are cases where lodging facilities and tourism associations undertake setting up the optional tour industry in order to promote autonomous development and diversification of tourism products, and extend periods of stay in Bagan. It is worth discussing ways to provide new incentives for travel agencies and new entrepreneurs to develop products using subsidies, etc., granted for observations aimed at product development and the establishment of an optional tour industry.

(2) Feedback from Tourists

According to interviews conducted with travel agencies that deal in travel to Bagan, tourists rate it as the best site-seeing location in Myanmar but the following need to be noted; 1) crowding and proper use of facilities during the peak season, and 2) improvement of management measures such as medical services are concerns to tourists. Tourists have specifically expressed concerns surrounding crowding of the main remains during the peak season, especially at the sunrise and sunset viewing spots of the Old Bagan district where tour buses, cars, wagons and motorbikes overflow in the streets taking away its true ambience and lessening the value of the experience. Discussion is necessary concerning proper usage – such as the introduction of a seasonal maximum capacity and decentralization of the temple remains where the sunset and sunrise can be viewed. Also, desire has been expressed to

mitigate on rude behavior such as entering the temples while wearing outdoor shoes and camping inside temple remains. Moreover, along with an increase in the number of tourists, safety concerns and dissatisfaction have been expressed with poor system preparations including lack of emergency transport and insufficient medical care.

(3) Branding

Bagan is currently listed in many travel guides and travel agency tour Brochures as 'one of the three great Buddhist remains of the world'. However, even if Bagan ranks along with 'Angkor Wat in Cambodia' and 'Borobudur in Indonesia', this distinction still doesn't serve properly to set apart the special features of Bagan.

One aspect that sets Bagan apart from other Buddhist remains is that it exists, even today, as a spiritual destination important to the faith of the people of Myanmar and is closely related to their everyday lives. For that reason it may even be called 'the world's greatest living Buddhist remains'.

(4) Tourism Promotion in Bagan

The Ministry of Hotels and Tourism (MoHT) of Myanmar is not actively engaged in external promotion activities due to lack of budget. Current promotions are being undertaken by Myanmar Tourism Marketing (MTM), a marketing division under the umbrella of 11 tourism-related industries that make up the Myanmar Tourism Federation (MTF). ITB Berlin, JATA Tokyo, WTM London and other organizations have set up displays for MTM at exhibitions in their respective countries. JATA Tokyo plans to hold a display on a scale much larger than that of last year's in September of 2014. Myanmar's minister of MoHT plans to travel to Japan for this event. At a JATA travel exhibition in 2013, other Japanese-run tour operators not associated with MTM, together with 3 private organizations set up their own Myanmar booths separate from each other. It will be necessary to build a framework that can support initiatives that incorporate the MoHT and private organizations as one entity.

Up until now, FAM tours of 5-10 individuals, sponsored by MTM and supported by subsidies from the ASEAN Center, have been held each month during the off season (May to October), for a total of 6-10 times (actually, these are monitoring tours where part of the travel expenses are covered by participants). One problem is the lack of awareness of these tours and the low number of product planning managers from tour companies who choose to participate. Also, approaching new travel agencies that do not deal in Myanmar tourism is also a problem. The basic objective of FAM tours is to raise awareness through travel agencies and media. With this in mind, it is worth discussing effective utilization of these monitoring tours to collect feedback and gather information through questionnaires for tourism-related businesses and tie them into joint SNS promotions.

The rainy season is considered 'the low-season' in Bagan. However, during this time, the landscape transforms into lush green paradise, and the rain actually doesn't have a great effect

on the remains. Rebranding of this season from 'the rainy season' to the "Green Season" will do away with negative associations attributable to the rain (site visits impossible). Holding promotions and advertising photo materials of this season is important for equalizing tourism demand throughout the year. If demand can be spread out through the whole year, private companies will be more apt to invest in the region and employment will increase.

Holding new events specifically during this 'off season' is an important factor. Revitalizing traditional culture and festivals that were lost due to lack of successors or were lost under the military government is a desire of the regional residents. 'Low season' promotional activities that center on festivals and culture may not necessarily lead to economic gains initially, but will instill pride in the regional residents, giving deeper cultural meaning to their lives.

(5) Promotional Materials

1) Brochure

Brochure created by the MoHT has a tendency of using unsatisfactory material, and contains plenty of information in a limited space such that its hard to find a focal point, due to the limit of promotion budget (USD 100,000 per year). Since the quality of brochure could change the impression of the place for the tourists, it has a room to improve.

At the ASEAN conferences, while comparing the tourist brochures of other countries, the Minister of Tourism admitted himself that the brochures from Myanmar were not grateful. However, the good and bad of the print greatly depend on the quality of the paper and printing technologies.

On the other hand, the private tourism brochures are aiming mainly at advertising, though some of them have good quality, because advertising takes most of the space, information needed by the tourists is relatively little.

In addition, although Japanese (Korean, Chinese) brochures are also made due to the support of ASEAN, the quality of the paper is poor and the Japanese description is a direct translation from English, which is quite difficult to read..

2) Map

Although maps of Bagan have been made by both the public and private, these maps show little information. A map costing 1000 MMK, only includes airport and some hotels, but the dusty cover is the evidence that the sales are in a poor state.

Tour guides said maps are not needed in a package-tour, but according to the association of guides in an interview, a guide is required to distribute maps during guidance. For independent tourists especially traveling freely by cars or E-bike, there is no available map with location information of the relics, and efficient routes to the sites.

¹⁶ The word of "the green season" is frequently used as a catch-copy by the travel agents in the Southeast Asian countries, which have rainy season. It is also used by the travel agents in Japan.

3) DVD

DVD produced by the MoHT for Travel Fares, Travel agents (also distributed to Embassy of Myanmar abroad), is not a video but a series of slides, which lacks impact and charm. The Japanese version supported by the ASEAN Center is the same as the Brochures poorly presented in Japanese, with unnatural Japanese.

4) H/P (Home Page)

The first H/P of former MoHT was created in 2004 which was revised when present MoHT was set up due to the reorganization of the Ministries and graded up to moment all the cost to create, revise and grade up were supported by the private sector (MTF). Even now revising cost has been still paid by the private and only the maintenance cost (USD 500 per year) paid by MoHT.

The H/P is an indispensable media platform for the potential customers to obtain information, which information can also determine whether to travel there, so it is an important source.

A H/P for the Bagan region has currently not been created and the MoHT has not allowed for this in its budget. For most of the tourists, magazines such as "Lonely Planet" and "Globe-trotter" are their main source of information (nearly all of Bagan's independent tourists travel while reading them). On the other hand, private agencies such as MTF (Myanmar Tourism Federation) initiated introductory sites (see the URL below) are so many and provide information more from the tourists' point of view than the government.

HTTP: //www.myanmar.Travel/index.php/about - Myanmar

5) TV Commercial (Branding)

The MoHT took measures to form a Branding strategy such as change to its logo, and the use of a new tag line --- "Let the Journey Begin" along with the production of commercial films with lengths of 30 seconds and 15 seconds (also being posted on You Tube), because of the support received from the World Economic Forum, they were also able to broadcast on BBC/CNN last year. The enthusiasm of MoHT displayed in changing of the country's image and creation of Branding should be expected.

2.2.5 Tourism Businesses

(1) Hotel, Motel and Guest-house

At the end of 2013, there were 77 lodging facilities with 2,386 rooms in Bagan legally permitted to lodge foreign tourists. These lodging facilities can be broken down into five categories ranging in reputation from 4-star to unrated. 15% of these facilities are 3 or 4-star, 15% are 2 or 1-star, and the remaining 70% are unrated.

Table 2.6 Hotel and Room at Bagan

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------|-------|-------|-------|-------|-------|-------|-------|
| Hotel | 84 | 74 | 74 | 75 | 75 | 76 | 77 |
| Room | 1,963 | 1,953 | 1,953 | 2,008 | 2,198 | 2,351 | 2,400 |
| Increase | - | - 10 | - | 55 | 190 | 153 | 49 |

Source: MoHT Bagan Branch

Many travel agencies often recommend hotels with a rating of 3 and 4-starhowever, these hotels are limited in Bagan which make it difficult to reserve a room during the peak season. In order to preserve the remains, restrictions on development keep new hotels from being developed outside of the hotel zone. It has become difficult to construct hotels outside of the 4th hotel zone. For this reason, the issue of skyrocketing hotel prices during the peak season and a drastic decline in "Value For Money," compared to that of surrounding countries, has become a point of concern.

(2) Travel Agents and Operators

A large part of the tourism industry present in Bagan consists of satellite shops of tour operators based in Yangon or partner agencies that offer guides or vehicles or carry out sales of plane tickets, cruise tickets, and local tours. A few new and innovative travel companies such as Grasshopper Adventures, which runs mountain bike tours, and the Japanese-run Sara Travels and Tours, Co., have begun to establish themselves in Bagan.

(3) Tour Guide

Most group tours are accompanied by a nationally licensed "through guide" from Yangon. The "station guides" in Bagan are usually employed upon the request of free independent tourist (FIT) at the front counter or concierge desk at hotels. In some cases, they are appointed by travel agencies in Yangon for attending the group tours without the use of "through guides".

With 130 nationally-accredited guides, the Myanmar Tourist Guides Association (MTGA) is registered as a 'Station Guide' in Bagan. Furthermore, 108 guides are regionally-accredited. However, among those numbers, only 40 individuals actually operate as guides. Also, many guides hold second jobs as merchants or instructors and only offer daily freelance services as they have not established their roots in the tour guide business¹⁷.

MTGA in Bagan includes only members who possess a national license. None of 108 regionally licensed tour guides has registered with MTGA in Bagan at the time¹⁸.

(4) Food Industry

There are roughly 100 restaurants in the Bagan region and 72 of these restaurants belong to the Bagan Restaurant Association. Most can be classified as SME and are family owned and operated. Some restaurants put on puppet shows or traditional dance performances.

Well known theatre restaurants in Bagan include the following;

¹⁷ The guide working in Bagan is deemed to be from Bagan except few moved from other town for their marriage. ¹⁸The regionally licensed guide has no requirement to register MTGA at this moment.

- Nanda Restaurant (Puppet show throughout the year)
- Amata Restaurant (Puppet show throughout the year and Traditional dance only in high season)
- Queen House (Puppet show and Traditional dance by children throughout the year. The quality of performance is poor.)





Puppet Shows

Traditional Dance

The Myanmar Restaurant Association in Bagan (MRA) was established in 2011. 72 joined MRA out of approximately 100 restaurants in Bagan. Most of them are regarded as small and medium enterprise (SME)'s run by family members. About 10 members are active. MRA has set up a fund and organizes periodical training programs.

(5) Souvenir Shops

Many souvenir shops deal in lacquer ware, sand art, jewelry, etc. Also, while some existing large-scale shops exist as partnerships with travel agencies, in recent years, boutique shops dealing in luxury goods have also prospered.

The large scale lacquer ware shops are concentrated in New Bagan. They are handling not only their own manufactured products but also ones produced in old Bagan, furthermore exporting them to Thailand. Recently shops with a different concept from theirs are emerging for example, one in boutique style and another with original brands whose technique of the production is in the traditional way but without clay. Those are also recommended by the Japanese embassy in Yangon.

2.2.6 Salient Characteristics and Expenditure of Tourists in Bagan

Behavioral characteristics of tourists can be, generally speaking, roughly characterized among Package tourists, FIT and backpackers. To analyze behavioral characteristics of tourists in Bagan, This the survey makes interview surveys to hotels instead of a foreign tourists interview survey. As a result, composition of package tourist, FIT and backpackers is approximately 50%, 25% and 25%, respectively. The followings are the behavioral characteristics of each group:

 Package tourists normally use hotels with 3 stars and 4 stars, and take breakfast and dinner under set menu, and lunch at restaurant outside (excluded from tour fare). normally transport with large bus as a group among tourism sites, hotel and restaurant. Accordingly, they have little chance to use money at Bagan except for souvenir, because they pre-pays tour fare before their travel to Bagan. Majority of package tourists stay one night 2days at Bagan, so ALS shall be 2 days.

- Backpackers normally stay at economical hotel like 1 star and 2 stars hotel. They take meal (breakfast, lunch and dinner) at restaurant in the downtown. They tend to move freely depending on their own interests and preference by sometimes using bicycle and E-bike of their hotel (free of charge),or sometimes horse cart. They buy small souvenir. They stay at Bagan longer than the package tourists and the FIT. The ALS seems 3 days. They spend more money than the package tourists.
- FIT normally stay at higher class hotel like 3 stars, 4 stars, 5 stars hotel. They take breakfast at their hotel, and lunch and dinner at restaurant in the downtown. They tend to move freely depending on their own interests and preference by using normally bicycle and E-bike of their hotel, and sometimes horse cart, rent-a-car with tourist guide. They sometimes visit tourism sits around Bagan like Mt. Popa. They buy souvenir. They stay at Bagan longer than the package tourists. The ALS seems 2.5 days. They spend more money than the package tourists and the backpackers.

2.2.7 Other Tourist Services

(1) Medical Services

If tourists in Nyaung-U Township get injured or sick, they are carried to one of the provincial or private hospitals. Provincial hospitals offer Medical, Surgical, Obstetrics and Gynecology, Pediatric, Dermatology, Anesthetic, Orthopedic and Dental. There are 20-30 foreign patients/day in high season. Most of injuries involve fall accidents, traffic accidents or illness (Hypertension, diabetes, asthma, etc.). In the hospital, there is portable X-ray diagnostic imaging equipment and digital X-ray diagnostic imaging machines, but no MRI machines or CT scan. When CT scan diagnosis is required, patients are carried to Pakkok (45 min from Nyaung-U Township by car) or Mandalay (3 hours by ambulance).

Picture Provincial Hospitals (Nyaung-U)



Guide to provincial hospital (facing the road)



From outside (established in 1974)



Reception



X-ray Machine (Right: Digital, Left: Portable)



Operating room



ICU



Fee-based room (Primarily for foreign tourists)



Equipment provided by JICA and AMDA (Infant warmer)

The Table below summarizes the number of medical health facilities and workers in Nyaung-U Township.

Table 2.7 Number of Medical Health Facilities

(As of December 2013)

| Category | Number of facilities | |
|----------------------------------|----------------------|--|
| Provincial Hospital(100 Beds) | 1 | |
| Sub Township Hospital(25 Beds) | 1 | |
| Taung Gyi Enki Hospital(16 Beds) | 1 | |
| Maternal and child health center | 1 | |
| Urban health center | 1 | |

| Category | Number of facilities | |
|-----------------------------------|----------------------|--|
| Regional health center | 6 | |
| Sun regional health center | 33 | |
| Disease control team | 4 | |
| Private hospital(20 Beds) | 1 | |
| Private hospital(Outpatient only) | 1 | |

Note: Private medical facilities under the level of clinic are not included

Source: Township Health Profile Nyaung-U Township Mandalay Region 2013

Table 2.8 **Number of Medical Workers**

(As of December 2013)

| Job category | Number | Incumbent | Vacancy |
|----------------------------|--------|-----------|---------|
| Medical doctor | 5 | 3 | 2 |
| Nurse | 1 | 1 | 0 |
| Senior public health nurse | 1 | 0 | 1 |
| Public health nurse | 7 | 7 | 0 |
| Senior midwife | 11 | 9 | 2 |
| Midwife | 51 | 51 | 0 |
| Senior Pharmacist | 4 | 4 | 0 |
| Pharmacist | 45 | 45 | 0 |

Source: JICA Survey Team

In the course of the interview surveys at Bagan, some hoteliers pointed out the necessity of a hospital with higher quality medical treatment for critical illness and injury of foreign tourist, which currently is not available in Bagan. Transport to Yangon or Thailand was another issue mentioned. The Guide Association plans to offer guidance, provide first aid kits at temples and heritage sites.

Depending on the job, although the required number of health care workers is set and has been employed, due to the insufficient setting and job vacancy, there is very low adequacy of health services when compared to the criteria of WHO or to the situation in Myanmar. Even if the health workers as shown in the table below (number of medical personnel) has been allocated, the number of health care workers per population will still be below the WHO standards (refer to "Medical Staff per Population" below). Considering that the number of tourists will keep increasing, it is necessary to review the necessary number of health care workers for tourism areas and to improve the medical services.

Table 2.9 **Medical Staff per Population**

(Unit: person)

| | | | | , , | |
|----------------|----------------|-----------------|-----------------------------|-----------------------------|--|
| Job | MILO eten dend | M | Nyaung-U district*1 | | |
| | WHO standard | Myanmar overall | Residents | Incl. Tourist*2 | |
| Medical Doctor | 5,000-10,000 | 3,000 | 55,800-93,000* ³ | 56,500-94,200* ³ | |
| Nurse | 300 | 3,000 | 6,100 | 6,100 | |

Note: *1Since the district hospital is the scope, this is the district population of 278,913 people (December

2013)
**2Assuming tourism high season (when accommodation is fully booked), in addition to the resident,

*3This range shows the assumed number of people – the current number

Source: JICA Survey Team

(2) Tourist Police

Currently there are four tourist police stations (Old Bagan, New Bagan, Nyaung-U and at Mount Popa). These were established as part of police stations under the jurisdiction of the Minister of Home Affairs on April 2013 based on a snatching crime that occurred in New Bagan in 2013; where the victim was a foreign tourist. To protect tourists, they offer transportation to hospitals in the event of incidents. Also they offer support for electric bike charging. The number of tourist police in Bagan is now about 50 covering 19 km² in the region and not enough to respond to all cases.

Tourist Police wearing "Tourist Police" uniforms are patrolling around tourism spots such as temples and monuments 24 hours a day. Four police stations have 1 patrol car, 5 bikes and 30 wireless communication devices. The Table below summarizes number of tourist police for each station, average number of incidents/month in high seasons and pictures of stations.

Table 2.10 Number of Tourist Police for Each Station

| Station | Number of police | | |
|------------|------------------|--|--|
| Old Bagan | 23 | | |
| New Bagan | 8 | | |
| Nyaung-U | 16 | | |
| Mount Popa | 3 | | |

Source: JICA Survey Team

Table 2.11 Average Number of Incidents by month (High Season)

| Reason | Number | | |
|-----------------------------|--------|--|--|
| Flat tire of electric bike | 20 | | |
| Electric bike out of charge | 7 | | |
| Incident | 3 | | |

Note: Snatching has not occurred since its establishment

Source: JICA Survey Team

Picture Tourist Police Station (New Bagan)



Tourist Police station from outside (facing the heavily traffic road)



Inside (1 officer resident)



An explanation plate in front of tourist police station



Station from outside (with 1 patrol car)



Tourist Police Vehicle



Tourist Police

(3) Intra-city Transport

The intra-city transport modes of Bagan include; cars, bicycles, E-bike and horse carts.

Bicycle and electric-bike are greatly popular for FIT to visit the sites at their convenience. These are preferable as intra-city transport modes because of their environmental friendliness and easy to rent at hotel, and need to be promoted in Bagan. However, dedicated lanes have not been provided, which results in risk of traffic accidents. Parking lots at the tourists sites have not been allocated, which also results in disordered parking all over the sites.

There is a horse cart which is quite useful for tourists viewing around narrow streets of Bagan, It is rented at a negotiable price basis, so it may need some efforts to improve transparency of the price.

Transportation of FIT





E-Bike (MMK 8,000 / day)

Bicycle (MMK 4,800 / day)

2.2.8 Organization and Institution on Tourism

(1) Organization of Tourism Development

1) Central Government (Nay Pyi Taw)

As mentioned Chapter 1, the "Central Committee for Development of the National Tourism Industry" will have the final authority over the tourism policy.

2) Regional Government (Mandalay)

As mentioned Chapter 2, "Tourism Planning Committee" proposed in the Myanmar Tourism M/P, will play a substantial function in Mandalay Region, however, there is no action instruction from Central government.

3) Local Government (Bagan)

DMO proposed in the Myanmar Tourism M/P is not yet established.

(2) Reform of MoHT

The Myanmar Government emphasizes four phases of reforms which are; political reform, economic reform, administration reform and private sector reform. Related to the tourism, administration reform is to decentralize certain authorities from the central government to the regional governments, private sector reform will formulate new rules on market, trade and investment with supervision and regulatory reforms to maximize business opportunities of private sector¹⁹. With these two policy guidelines the Myanmar Government will privatize many state-owned enterprises. Along with this policy direction, MoHT will separate and privatize Myanmar Travel & Tours (MTT) while, the MoHT will devote itself to policy and regulator functions such as policy-making, planning, administration and guiding²⁰.

http://www.president-office.gov.mm/en/?q=briefing-room/news/2014/01/28/id-3231

²⁰ Based on the results of interview to the MoHT staffs

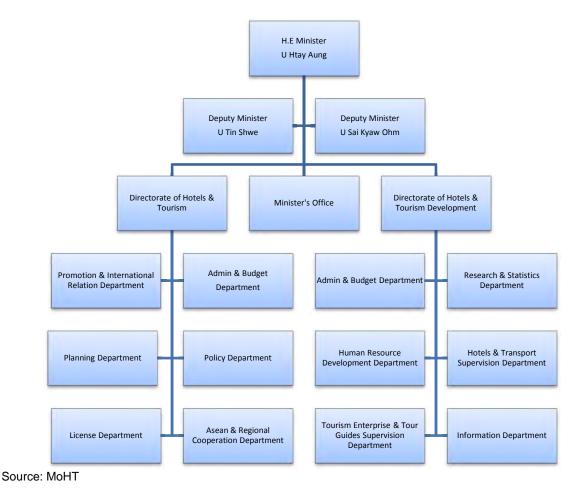


Figure 2.4 New Organization of MoHT

1) Directorate of Hotels and Tourism

Directorate of Hotels and Tourism is responsible for tourism administration, policy and planning, promotion and licensing hotels. It has the following departments:

- Administration and Budget Department
- Tourism Promotion and International Relation Department
- Hotel and Tourism License Department
- Planning Department
- ASEAN & Regional Cooperation Department
- Policy Department

2) The Directorate of Hotels and Tourism Development

The Directorate of Hotels and Tourism Development is responsible for human resource development, information, supervision and guide of tourism businesses. This directorate is newly structured to specialize in supervision and guide of private tourism businesses of which functionality was originally under Myanmar Hotel and Tourism Service (MHTS). The other function of MHTS of directing tourism businesses such as operation of state-owned hotels, restaurants and travel agents is privatized in order to focus the MoHT as a regulator and supervisor of private businesses. It has the following departments.

Administration & Finance Department.

- Human Resource Development Department.
- The Information Department.
- · Research and Statistic Department.
- Hotel and Transport Supervision Department.
- Tourism Enterprise and Tour Guide Supervision Department.
- · It will accommodate the Branch Office.

(3) Private Organizations in Bagan

Myanmar Tourism Federation (MTF) is the private organization for tourism promotion in Myanmar and consists of 11 private associations related with tourism. All the 11 associations are taken collectively as one nation-wide association. Bagan has 5 (five) local associations under the MTF such as:

- · Hotelier Association (Bagan).
- Restaurant Association (Bagan).
- Guide Association (Bagan).
- Tourism Transportation Association.
- · Souvenir Entrepreneurs Association.

At present, Hotelier association (Bagan) and Restaurant Association (Bagan) individually conduct their own training and observation trips. There is no relation or joint activity among these 5 local associations. There is no association which regularly collects member fees in Bagan.

Incidentally, MTF was established under the Myanmar Hotel and Tourism Law (1993). MTF is under the supervision of the MoHT, according to the law. Since local associations in Bagan are considered as branches of the nation-wide association, thus these local associations are also supervised by the MoHT. In case a new tourism organization merges existing 5 local associations and other private businesses in Bagan it will be the branch of the MTF. Therefore, this organization may be required and thereafter get approval from the MoHT.

(4) Organization and Institution

1) Heritage Conservation

Heritage conservation is under the responsibility of the Department of Archaeology, National Museum and Library and the Ministry of Culture. The department implements heritage conservation depending on the 5 national laws and the 5 special laws for Bagan as shown in Table 2.11. As an exceptional case, some heritage temples/sites are managed by "Gopaka" which is an organization of believers. The Gopaka carry out repair and maintenance of their heritage temple/site. The temples managed by the Gopaka are under the responsibility of the Ministry of Religion.

2) Landscape and Development Control

Landscape and Development in Bagan are strictly controlled by the "Township Law Restoration Council for Pagan-Nyaung Oo Township (1994)." This law stipulates land use regulation and building regulation such as height, set-back. Basing on this law, new development projects must get approval mainly from the Department of Archaeology, National Museum and Library,

Nyaung-U Township Development Council and the General Affairs Department of Nyaung-U District.

3) Tourism Statistics

Tourism statistics are important and the basis of information for policy-making and planning by the MoHT. Tourism statistics are gathered and compiled by both Bagan Branch of the MoHT and the MoHT. The MoHT Bagan office takes care of statistics on foreign visitors, domestic visitors and accommodation in Bagan. However, these statistics only provide the number of tourists, unfortunately the behavior of tourist in Bagan is ignored, which is necessary for planning and monitoring of tourism administration, making this analysis with this data complex.

For the time being, the Research and Statistics Department of the MoHT carries out sample interview surveys on foreign tourists once a year. This survey covers various aspects of tourists including travel patterns, origin of country, sex and age, however, data presented to the public is too shallow to use for detailed analysis like tourist behavior.

The UN carried out training course on TSA(Tourism Satellite Account), targeting staffs of the MoHT.

4) Tourism Products Development

There is no authority regulating tourism products, souvenir and tours in Myanmar, so all of them are individually managed by private businesses. There is a Myanmar Travel Agents Association and Myanmar Souvenir Association as a nation-wide private organization in Myanmar however, these associations have little activities. There is no branch of these associations in Bagan.

5) Tourism Promotion

The Department of Promotion and International Relations of the MoHT is responsible for nation-wide tourism promotion and marketing. The MTF implements promotional activities together with the MoHT. In Bagan, there is no organization or private business that carries out promotional activities specifically in Bagan .

6) Business Administration

Regarding hotels, Myanmar has laws concerning registration and licensing, laws involving construction, and laws regarding grading as listed below. The Department of Hotel and License and the Department of Hotel and Transport Supervision are responsible for registration and licensing and supervision respectively. These departments have no section in branch offices.

- Myanmar Hotel And Tourism Law (1993)
- Order Relation To Licensing of Hotel And Lodging-House Business (2011)
- Rule & Regulation for Hotel Construction (2010)
- Rule & Regulation for Star Selection of Hotel (2011)

Incidentally, there is another registration system in Myanmar besides the MoHT, which is registration at the Township Development Council. The hotel registers to the MoHT that it can accommodate both foreign and domestic tourists unfortunately, the same hotels register with

the Township Development Council that they can only accommodate domestic tourists.

Bagan has no incentives to promote tourism investment.

Looking at guides, travel agents and transport business, each business has regulation on licensing and business supervision as listed below; Department of Hotel and License and Department of Hotel and Transport Supervision are responsible for registration, licensing, and supervision respectively. These departments have no section in branch offices.

- Order Relation To Licensing of Tourist Transport Business(2011)
- Order Relation To Licensing of Tour Guide Business(2011)
- Order Relation To Licensing of Tour Operation Enterprise(2011)

(5) Basic Laws

The Myanmar Hotel and Tourism Law which covers the overall rules and regulations of Myanmar tourism industry was established in 1993. MoHT is currently revising the law and related laws/regulations by receiving advice from an expert from United Nation World Tourism Organization (UNWTO). The Policy Department and the Directorate of Hotels and Tourism is in charge of legal matters in the MoHT. MoHT aims at completing the amendment of the law and its related laws/regulations by the end of next year but the MoHT fails short of an adequate budget and human resources.

There is no law/regulation to manage tourism destination like the Tourism Destination Law in Japan but there are several specific laws in Bagan regarding heritage conservation, landscape and development control as mentioned in previous section.

Organization and legislation regarding tourism administration mentioned above are summarized in the following table.

Table 2.12 Organization and Legislation regarding Tourism Administration

| Field sector | | Organization | | Logislation | |
|--------------------------|--------|---|------------------|---|--|
| rieid | secioi | Public | Private | Legislation | |
| Heritage Conservation | | Department of Archaeology, National Museum and Library, Ministry of Culture | Trustee (Gopaka) | National The Antiquities Act, 1957 The Law Amending the Antiquities Act 1957, 1962 The Protection and Preservation of Cultural Heritage Regions Law The Law Amending the Protection and Preservation of Cultural Heritage Regions Law Enforcement Regulations in accordance with the Protection and Preservation of Cultural Heritage Regions Law [Only for Bagan] Management Plan: Protection Status and Zoning Guideline No. 1/ 2013 (regarding development central) Guideline No. 2/ 2013 (regarding development control) | |

| Field | sector | Organization | | Legislation |
|--|---------------|---|---------------------------------------|--|
| | 333.51 | Public | Private | |
| | | | | Promulgated disciplines for Pagoda Trustees in Archaeological site Promulgated Disciplines for Shops roundabout of Archaeological Buildings' Platform, Religious Sites and Compound |
| Landscape and Development Control | | Department of Archaeology, National Museum and Library, Ministry of Culture Township Development Council General Affairs Department | No | Township Law Restoration Council for Pagan-Nyaung-Oo Township 規制 (1994) |
| Tourism Statistics | | Research And Statistics Department, Directorate of Hotel & Tourism Development, MoHT | No | |
| Tourism Products Development | Tour | No | Myanmar Travel Agents | Order Relation to Licensing of Tour Operation Enterprise (2011) |
| | Tourist sites | No | No | |
| | Souvenir | No | Myanmar Souvenir Association | |
| Tourism Promotion | | Tourism Promotion And International Department, MoHT | MTF(Myanmar Tourism Federation) | |
| Supervision and guide of Tourism Business | Hotel | Hotel and Tourism License Department, Hotel and Transport Supervision Department, MoHT | Hotelier Association | Role & Regulation for Hotel Construction (2010) Role & Regulation for Star Selection of Hotel (2011) Order Relation to Licensing of Hotel And (2011) Lodging-House Business (2011) |
| | Restaurant | Township Develop Committee | Restaurant Association | |
| | Guide | Hotel and Tourism License Department, | Guide Association | Order Relation to Licensing of Tour Guide Business (2011) |
| | Agent | Tourism Enterprise and Tour Guides | No | Order Relation to Licensing of Tour Operation Enterprise (2011) |
| | Transport | Supervision Department, MoHT | Tourism Transport Association | Order Relation to Licensing of Tourist Transport Business (2011) |
| General Tourism Administration | | Policy Department, MoHT | No | Procedures Relating To The Myanmar Tourism Law (1990) Myanmar Hotel & Tourism Law (1993) |

Source: JICA Survey Team

2.3 Tourism-related Infrastructure

2.3.1 Tourism Infrastructure

(1) Tourist Information Center (currently Tourist Information Counter)

In Bagan, a total of 3 tourist information counters are currently available: 1 head office (New Bagan Town) and 2 branch offices (in Nyaung- U Town and inside Nyaung-U airport. The services offered there are mainly providing tourists with maps and pamphlets as well as identifying tourist spots and facilities around them. A total of 8 staff working in shifts manages these 3 Tourist Information Centers.

Tourist Information Center (TIC) is a facility rarely used by tourists coming through travel agencies, but is often used by FIT. Due to the reorganization within MoHT, and the business suspension of Myanmar Travels & Tours (MTT), the new center was unable to adapt, and the failure of efficiently supplying information at the tourism spots to the increasing FIT, cost loss of opportunities.

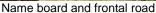
Major TIC at airports, major railway stations and major cities are generally managed by government tourism agencies (like the National Tourism Organization) in many countries including advanced countries, on the other hand, local TICs are mainly run by the private "Tourism Association", which receive some subsidy from the public sector. However, because of inadequate human resources and limited budget, cases of government initiated facilities becoming dysfunctional are quite common in developing countries.

To utilize TIC more effectively, TIC is necessary to meet the needs of travelers, but also has to become a platform to meet the needs of the travel agencies, hotels, restaurants, transportation, and so on.

The characteristics of each TIC's infrastructure are shown below.

Picture: Tourist Information Counter and MoHT Bagan Headquarters (New Bagan Town)







The view of Tourist Information Center



Service room (right in after the entrance, the front doors on each side lead to toilets)



Front Counter



Deputy Director's Office (also used for meetings with staff)



Staff room (with desks, chairs, fridge, TV, and storage)



Well and elevated tank



Electric meter and electric wire

- The building is placed facing the road. There is a big sign board placed inside the site, facing the road. 15 people/day visit during high season and 2-3 people/day during off season.
- 3 rooms inside are about 4m x 4m: one as the service room and the other two are the staff workspace. Many windows and doors make the room bright and create good ventilation (floor: exposed concrete, wall: mortar painted, ceiling: gypsum board)
- The service room contains: a counter to provide tourists with maps and pamphlets, a small table with chairs for 4 people, a map on the wall, 1 bookshelf (used to keep pamphlets as well as internal documents), and a white board.

- The toilets are at one side of the room, with female and male toilets placed opposite each other. The toilets are also for tourists.
- There is a well and an elevated tank at the site where the water for daily use comes from.

 Drinkable water needs to be purchased.
- Electric power is supplied at an average cost of MMK 15,000 per month.

Tourist Information Counter (Nyaung-U Town)



The view of Tourist Information Counter (facing busy road)



Service room right after the entrance



The inside of the Service room



Looking at the service room from the staff' rest area



Staffs' rest area (the door in this picture connects to outside)



Outside view from staffs' rest area

• Located in the busy downtown area (since May 2012). 10 people/day visit during high season and 0-2 people/day during low season.

- Inside, there are: 2 rooms approximately 3.5m x 3.5m each: one room is used as the service room and the other one as staff rest area (including 2 night guards). (Floor: brick + vinyl carpet, wall: brick/ bamboo plate/ steel plate, ceiling: bamboo plate)
- The service room contains: a counter to provide tourists with maps and pamphlets, a small table with chairs for 4 people, and a small table with chairs for 2 people.
- Since there is no well nor tap water, water for daily use as well as drinking has to be purchased (MMK 500/barrel)
- Electric power is supplied at an average cost of MMK 3,000 per month.



Entrance Fee Ticketing Counter by Department of Archeology, MoCul (DOA) in front of TIC



Tourist Information Counter with Japanese pamphlet

- TIC is located just in front of the arrival gate in the lobby. The location is easy to be found, but sometimes difficult to distinguish from the entrance fee ticketing counter by DoA.
- Staff of the MoHT service at the counter by rotation.

(2) Sign, Explanation Plate

The design, location, and management of tourism signs and explanation plates are under the jurisdiction of the archaeological bureau, whose permission is compulsory for any tourism agency or private company that wants to put up signs. Signs are divided into 3 types:

- 1) Direction sign
- 2) Alerting / warning
- 3) Explanation

There are approximately 50-60 explanation plate types 1) and 2). They are being renewed gradually from March 2014. (currently 14 of type 1) and 22 of type 2) have been renewed). The current situation of signs and explanation plates is described below.

1) Direction Sign

There are 3 types of signs to indicate directions: 1 direction only, 2 different directions, 3 different directions. 50-60 old plates are gradually being replaced with new ones. (14 of them have been renewed as of March 2014). Durability and visibility have been improved by

replacing simply painted wooden plates with reflecting-painted steel plates. For new direction signs, the size of plates is standardized (Height:7'~8'3" (Approx. 220~260cm, according to number of direction sign), Plate:2'6"x10'(Approx. 80cmx30cm). Direction sign 1, 2, 3 are standardized to MMK 97,000, MMK 110,000, MMK 130,000 respectively. Below summarizes old and new pictures, direction, location and number of plates.

Old and new direction signs (examples)



Left: New direction sign, Right: Old direction sign



Left: New direction sign, Right: Old direction sign



Basement of old direction sign is pegged embedded on the ground

Direction sign boards are few and set in limited locations to give adequate directions to major temples and pagodas. Accordingly, individual tourists accessing the heritage sites by E-bike or bicycles cannot get sufficient information about distance / kilometers and proper directions of turns at crossroad sections. In addition, there are many old-fashion direction signs and to make matters worse indicating only in Myanmar language.

Direction signs need to be changed in material from wood to iron, so that the life duration of the direction sign can increase. There are many direction signs not properly setup due to a shallow and small base, their foundations cannot be dug to sufficient depth due to proximity to the heritage sites. Capping on the piers of the direction sign have wooden accessories shaped like pagodas, but many of them are dropped.

It may be necessary to improve/revise the specifications of the direction sign prior to making repair and maintenance.

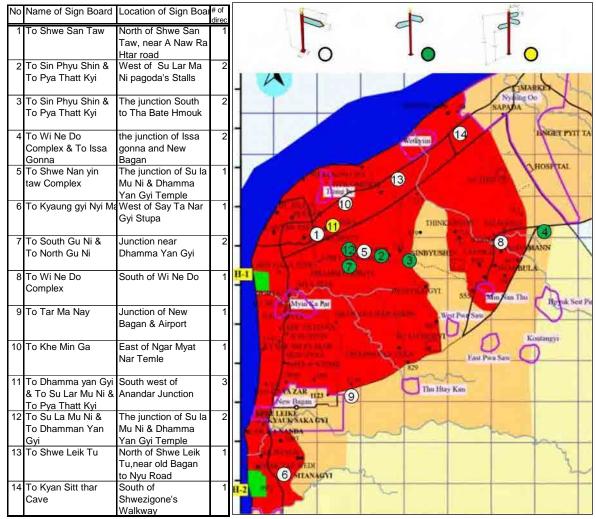


Table 2.13 Direction, Location and Number of Plates of Direction Sign (1)

Source: DOA, MoCul

2) Alerting / warning

Alerting plates are set near the front of main monuments and temples to guide behaviors and ware of tourists. They used to be wooden plates, but gradually these are being replaced with steel plates. By the end of March 2014, 22 plates were renewed (except explanation plates owned by museums). Plate costs are standardized at MMK 61,000 in principle, although those that do not meet the criteria can be used subject to the permission of the archaeological bureau. Standardized size, sample picture and location of plates are shown below.

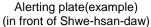
The Alerting plate indicates prohibited attire. It is easy to understand prohibition of socks, shoes and short pants but it is difficult to understand the symbol of a "Spaghetti Blouse" on the plate, which indicates a sleeveless shirt. The Spaghetti Blouse normally means a spaghetti strap blouse but it is difficult to understand whether its prohibition of strap, sleeveless, or both. In addition, there is an unclear category of attire such as "Tank Top" and "Running shirt", since they are normally prohibited in temples/ religious places in other countries.

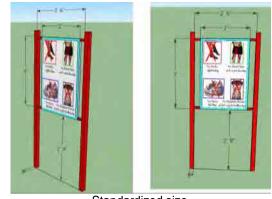
Meanwhile, the plate has the same problem in structure as the direction sign, it may be

necessary to improve/revise the specifications of the plate through the results received from monitoring.

New and old direction signs (example)

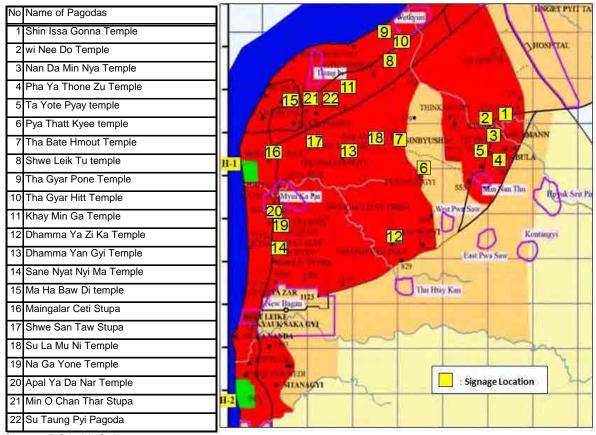






Standardized size
(3' Width(Approx. 90cm), 6' Height(Approx. 180cm))
Source: DOA, MoCul

Table 2.14 Direction, Location and Number of Plates of Direction Sign (2)



Source: DOA, MoCul

3) Explanation plates

Explanation plates are set in front of main temples and monuments. Those plates outline descriptions of the objects. Engraving on stone and mortar have been widely used although,

currently steel and wooden plates are rather common due to ease in maintenance as well as capacity of display.

Explanation plates (examples)



An explanation plate engraved on stone



An promotional plate engraved on stone and showing directional sign at the back (with support of KOICA)



A steel explanation plates and wooden enclosure (with support of Chinese NGO)



Explanation plate:
3'x4'
(Approx. 90cmx120cm)



Enclosure: 8'2"x8'8" (Approx. 250cmx270cm)

Size of plates and enclosures on left hand side Source: DOA, MoCul

Except for the explanation plate supported by a Chinese NGO, the contents of explanation plates are usually not appropriately described usually without graphics and photos and therefore not catching to the tourists. Most of plaques and explanation plates contributed by donors are providing information about the donors themselves.

(3) Tourism Infrastructure around Historical Heritage Sites

1) Access to Sites, Parking Lots

Despite a large number of tourists using motorized bicycles, bicycle lanes are not well developed and the width is still narrow. For this reason, tourists often go through side shoulders or unpaved roads. There are insufficient rest places, toilets and water points. Wind-blown dust is annoying. Currently, parking areas are not specified and hence drivers park their cars in a disorganized manner such as under shades of trees near the road and at historical sites.

2) Landscape

We consider that beautiful sunrise and sunsets as well as scenery of temples and pagoda (captured from lands, rivers and aerial, lighted up during night) are very important tourism assets. Any factor possibly deteriorating or harming this landscape must be analyzed and resolved.

A particularly important issue is vegetation. Planting of eucalyptus, an exotic species which grows rapidly was encouraged by MoECAF, may block the view to temples and pagodas in the near future, and invasive exotic species like Mesquite (*Prosopis juliflora*) are adversely affecting the growth of indigenous plants in the region.

Therefore when planting within the Archaeological Zone, the selection of types of tree is important to minimize disturbance of landscape and sustaining the micro-climate of the area. Increase of rainfall leads to deterioration of the heritage buildings, so the "endemism" as a dry zone should be taken more into account. On the other hand, decrease of groundwater makes the ground settle, hence negatively affecting the heritage.

A study on vegetation is important not only because of landscape issues but it is expected to contribute to the amenity and comfort of tourists and heritage conservation. Note that KOICA has already implemented USD 1.5 million in vegetation from 2008 to 2010. The outcome of this project needs to be examined.



Vegetation project by KOICA Seeding field



Describing the name of subject temples, the scientific name of species planted and the number of plants

JICA also supported the afforestation project in five phases under the scheme of Grant Aid project "The project for Afforestation in the Dry Zone of Central Myanmar" from 2002 to 2007 providing JPY 1.5 billion. Although JICA did not interfere with the planting around the monuments like KOICA did and therefore it is not directly related with the proposed pilot projects of tourism infrastructure, JICA's activities were focused on the protected forest of Ingyin Tree (*Shorea robusta:* Sal Tree) near Zee-O village which could be an ideal destination for eco-tourism.

While conserving the protected forests near Zee-O village, the nature interpretation such as age and height of trees, culture and life of village nearby, and introduction of 100 year old tamarind tree done by the manager of the protected forests, hence it has potential tourist

attractions as eco-tourism.

Acacia family is the most popular species in Bagan and the following tree species are frequently observed locally.

Cassia siamea, Albizzia lebbek, Azadirachta indica, Delonix regia, Cassia fistula, Chucrasira tabularis, Tamarindus indica, Bougainvillea alabra, Mimusops elengi, Nerium oleander, Polvalthia longifolia



Tree line in the central separation zone of trunk



Young tree of *Delonix regia* blooming red flowers.

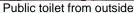
(within Ancient Monument Zone)

3) Public Toilet (administered by DOA, MoCul)

In the concerned region, only Old Bagan has three public toilets. Those are new flush water toilets established in 2012. 2 wash basins and 2 toilets are set up for male and female. A fee of MMK 200 is collected for maintenance and management costs. In addition, a new toilet is under construction in Old Bagan.

Public Toilet (Old Bagan)







Public toilet inside

The location of prioritized 22 temples and pagodas by DOA, MoCul, observation spots, location of ancient water channel, monuments with light-up facility and villages may possible to visited as CBT are shown in the following map.

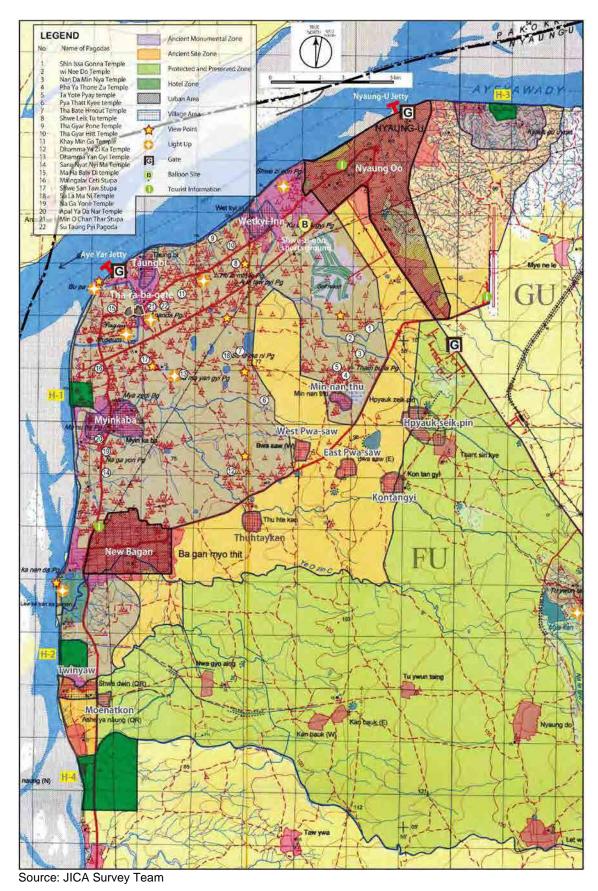


Figure 2.5 Locations of 22 heritages in the Archaeological Zone, Villages and Tourism Attractions

2.3.2 Basic Infrastructures

The study result of infrastructures designed with consideration of regional demand as well as demand in the tourism industry is described below.

(1) Airport

Tourists to Bagan normally use Nyaung-U Airport. Nyaung-U airport is the fourth largest airport in Myanmar in terms of the number of domestic passengers. The annual average number of flight has been increasing 30% annually in the last 5 years. The number of 2013 is about 2.6 times the number of 2009, and because of that the number of passengers also grew significantly, about 2.3 times from 2009 to 2013.

Table 2.15 Annual Number of Flights and Passengers at Nyaung-U Airport

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------------|--------|---------|---------|---------|---------|---------|
| Number of flights | 1,445 | 1,779 | 2,287 | 3,362 | 3,954 | 4,625 |
| Growth rate | - | 23.1% | 28.6% | 47.0% | 17.6% | 17.0% |
| Number of Passengers | 88,083 | 127,285 | 157,221 | 212,537 | 278,913 | 287,548 |
| Growth rate | - | 44.5% | 23.5% | 35.2% | 31.2% | 3.1% |

Source: Nyaung-U Airport

The Nyaung-U Airport is located 3 km south from Nyaung-U town, 5-6 minutes by car from the city center and 20 minutes by car from New Bagan. It has good access to historical heritage sites.



Design of terminal building is inspired by the wing of royal palace as it is the gate for Bagan, a tourism spot.

There is no boarding bridge.

There are 2 departure lobbies, one each on the left and right side of the arrival lobby in the airport terminal building. Each lobby has installed an X-ray inspection apparatus for inspecting checked and carry-on baggage.

The airstrip is 2,591 m long and 30 m wide. However, since there is a pagoda right next to the airstrip, the width does not reach 45 m recommended by International Civil Aviation

Organization (ICAO). Also, the only lighting is that of the airstrip lights, with no approach light, identification light, or guiding light in the vicinity. Moreover, because there is no filling station, the time and route of flights are limited. These are one of the constraints to extend the ASL of the tourists as well as to diversify tourism products.

A JICA study was conducted in February 2013 to address the increasing tourist demand. The JICA Study plans instrument flight (non-precision), including installation of all directions and range distance measuring device from visual flight as part of a Japanese Grant Aid scheme project. This may significantly contribute to have scheduled night flight as well as to reduce flight cancelation due to bad weather. It sustains tour routes of Bagan well.

By the way, Nyaung-U airport is close to heritage sites so that vibration might have an adverse impact (empirical data regarding this impact does not exist); thus its relocation / expansion to Pakkok Airport or new Airport in Chauk are recommended by the MoCul and UNESCO. However, the people in Bagan have different insights: renovation of the existing airport even without expansion because there might be a negative commercial impact from relocating the airport. In the long term, it is necessary to consider the way to have international direct flights, for example, new airport, renovation of Pakkok airport, use of Mandalay airport, etc. should be studied.



Waiting room ahead of security control.

There is no boarding bridge.



Pavement of airstrips has been deteriorated.
Visual flights are assumed.

(2) Port related Facilities

There are 2 ship arrival areas: one in Nyaung-U Town (mainly for small boats) and the other one in Old Bagan (large boats mooring mixed with small boats), where relatively big ships from Mandalay anchor. Number of passengers at the ship arrival areas is shown as below:

Table 2.16 Passengers of Water-way

| Voor | Domestic Tourists and Users | | | | | |
|----------------------------------|-----------------------------|------------------|-------|--|--|--|
| Year | Bagan → Mandalay | Mandalay → Bagan | Total | | | |
| 2011 | 4,410 | 2,749 | 7,159 | | | |
| 2012 | 1,214 | 5,447 | 6,661 | | | |
| 2013 | 808 | 1,432 | 2,240 | | | |
| 2014 Half a year from January | 217 | 466 | 683 | | | |

Source: Inland Waterways Transport Authority

The passengers of water-way have declined; the drop in 2013 is particularly severe. The reason of this may be increase of bus users and difficulty of ship navigation due to lower water-level of the Irrawaddy River. Road improvements such as road widening and expansion highway network may be accelerated are likely to diminish the number of people using ships, especially the local residents.

The waterway transport between Bagan and Mandalay are provided by both the private and public sectors as summarized in the following table:

Table 2.17 Long-distant Ferries between Bagan - Mandalay

| Operator | Number of Boat | Size of Boat | Fare | Time required | Servic (Sea (High) | ce day son) (Off) |
|---|-------------------------|------------------------------|---|---|--------------------------|---|
| Belmond Road to Mandalay (private) | 1ship | 43 cabins 82 pax | M=>B USD 2,520 B=>M USD 2,820 B=>M=>B M=>B=>M USD 3,610 | M=>B: B=>M: 5 days and 4 nights | 6cruise July - De | |
| Belmond Orcaella (private) | 1ship | 26 cabins 50 pax | Y=>B USD 5,500 M=>B USD 6,900 | Y=>B 8 days and 7 nights M=>B: 12 days and 11 nights | 6 cruise July - De | |
| Ayravata Cruises Pandow (private) | 1ship | 20 cabins 40pax~ 60pax | M=>B USD 2,520 B=>M USD 2,820 | | | |
| RV Paukan 2012 (private) | | 20 cabins | M=>B USD 1,824~USD 2,717 | M=>B: 5 days and 4 nights | | |
| Inland Water Transport (IWT) (public) Han Thar Waddy | Slow Boat 2 boats | 80 pax | M=>B B=>M Lower/Upper Deck USD 10/USD 20 | 雨期 M=>B: 8 hours B=>M: 10 hours Dry season M=>B: 10 hours B=>M: 12 hours | | February /s / week |
| IWT Bhamo (public) | 1 boat | | lower/upper deck/cabin USD 9/24/54 | M=>B: 10 hours B=>M: 12 時間 | | February /s / week |
| Shwe Keinnery Boat (private) | 3 boats | 130 pax | M=>B USD 40 B=>M USD 43 | M=>B 11 hours B=>M 12.5 hours | everyday | 2 days / week 3 days / week in Aug. |
| RV Mahaythi (private) | 4 boats | 16~ 60 pax | B=>M charter USD 950∼USD 1,950 | B=>M 12 hours 2 days / | | |

Source: JICA Survey Team

The characteristic of transportation by waterway is a huge difference on fare, depending upon the content of cruises, specification of boats and duration of cruises. Cruising ship itself is a tourism product to enjoy visiting various villages and attractions along the way to Bagan, which is quite different from other modes of transport.

Likewise, tourism by water-way is not merely for visiting Bagan from Yangon or Mandalay, but also providing alternative attractions such as: visiting a village on the other side of the river,

famous for traditional textile or advancing upstream, visiting temples by approaching from the riverside and enjoying views of Pagodas and Monuments which could combine all of these attractions. Since sunsets seen from the river and cruises to see the ruins have been popular with tourists, during this time there are many ships traveling upstream, and they move slowly while watching the sunset. There are also approaches to the ruins using ships as well as a cool breeze of the evening on the riverside, which make activities related to boats and river an important alternative to encourage tourist to stay longer.

Although it is possible to enjoy these activities by boat, currently there is no proper mooring area nor waiting room and proper toilets.

Even though the route becomes narrow due to the rising riverbed that causes trouble when travelling from Mandalay as well as berthing during dry season, with a little turning as shown in the picture below, this condition is still acceptable for large ships to dock. It can be seen here and there that getting on and off from the boat is by use of wooden platforms or providing small boats to be utilized as a barge.

The reason behind this is the wide difference of 9 m (nearly 30 ft) of water level between the dry and rainy seasons. It is therefore important to take this into consideration and properly survey the shore of the river during the rainy season when planning for the facility.



Simple stairway and pier, which are rebuilt every year after the submergences.



Large ships cannot dock because of shallow river bed. Instead passengers embark on ships by using the barge

Each boat has to pay annual fee to moor at a river bank without docks, creating conflicts of interest with some hotels that are trying to make some riverside area their own. Moreover, since the location of docks and berths for big ships are not legally fixed, the ship companies are at odds with the hotels located at the riverside regarding berths. Even though construction of semi-permanent pier and maintenance of boarding access are necessary, it is important to first solve the legal problems mentioned above.

(3) Inter-city Road, Intra-city Road and Bus Terminal

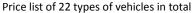
1) Inter-city Road

Land accesses to Bagan are mainly from Mandalay and from Yangon / Nay Pyi Taw. Major roads to access Mandalay and from Yangon / Nay Pyi Taw are managed by private concessionaire. Each road has tollbooth at the boundary of Nyaung-U District (one the gate from Mandalay: Myin Chan, the other the gate from Yangon and Nay Pyi Taw: Taung Ba) and correct fare.

This private concession is Built-Operate-Transfer -BOT) contract for 40 years. The private concessionaire is responsible for road maintenance and road widening in accordance with future increase of traffic volume. The roads under the BOT scheme have 75 ft (23 meters) of right of way (ROW)at both sides and most of houses have been already set-back 75 ft along the roads, so there is little problem on land acquisition.

Each of these tollbooths has pricing list for 22 types of vehicles, and quantitative data (number of cars, charge) is recorded in handwriting.







Myin Chan Tollbooth (entering from Mandalay)

Table 2.18 Passing Traffic at Tollbooth (Myin Chan)

| | | 2013 | | | | | | | | | |
|-----------------------------|-------|--------|-------|--------|-------|--------|-------|----------|--|--|--|
| Type of Vehicle | Jar | nuary | А | April | | May | | November | | | |
| | Bus | People | Bus | People | Bus | People | Bus | People | | | |
| Mini Bus: 25 pax | 687 | 11,507 | 883 | 14,790 | 870 | 14,573 | 776 | 12,998 | | | |
| Medium Bus: 26 to 35 pax | 59 | 1,225 | 51 | 1,059 | 27 | 561 | 27 | 561 | | | |
| Large Bus: 36 to 45 pax | 1,078 | 29,613 | 1,068 | 29,338 | 1,087 | 29,860 | 738 | 20,273 | | | |
| Express Bus: ≧ 46 pax | 214 | 7,312 | 309 | 10,559 | 271 | 9,260 | 173 | 5,911 | | | |
| Total | 2,038 | 49,658 | 2,311 | 55,746 | 2,255 | 54,253 | 1,714 | 39,743 | | | |

Source: JICA Survey Team

As shown in the table above, average passing traffic by bus from Mandalay is 2,000 buses/month, 1,000 of which are large buses. If the occupancy of seats per vehicle is 67% (annual average: 100% in peak season and 34% in off season), 50,000 people will enter to Bagan with these buses. In addition, there are also more than 2,000 of 15-seater light trucks commonly used by the locals coming to Bagan, and if the number of passengers per vehicle is 10, this equals to 20,000 people entering the area. From this, the fact that roughly 70,000 people per month will visit can be understood, most of which are the locals.

As shown in the table below, average passing traffic by bus from Nay Pyi Taw and Yangon is more than 2,000 buses/ month, more than 1,000 of which are express buses (different to the characteristic of Mandalay). If the occupancy of seats per vehicle is 67% (annual average: 100% in peak season and 34% in off season), 60,000 people will enter to Bagan with these buses. In addition, there are also more than 1,500 of 15-seater light trucks commonly used by the locals coming to Bagan, and if the number of passengers per vehicle is 10, this equals to 15,000 people entering the area. From this, the fact that roughly more than 75,000 people per month will visit can be understood, most of which are the locals.

Table 2.19 Passing Traffic at Tollbooth (Taung Ba) from Kyaukpadaung

| | | 2014 | | | | | |
|-----------------------------|-------|-----------------|-------|--------|-------|--------|--|
| Type of Vehicle | Feb | ruary | Ma | arch | Α | pril | |
| | Bus | People | Bus | People | Bus | People | |
| Mini Bus: 25 pax | 543 | 9,095 | 598 | 10,017 | 695 | 11,641 | |
| Medium Bus: 26 to 35 pax | 359 | 7,456 358 7,436 | | 7,436 | 422 | 8,765 | |
| Large Bus: 36 to 45 pax | 345 | 9,477 | 414 | 11,373 | 331 | 9,093 | |
| Express Bus: ≧ 46 pax | 787 | 26,892 | 1,000 | 34,170 | 1,084 | 37,040 | |
| Total | 2,034 | 52,921 | 2,370 | 62,995 | 2,532 | 66,539 | |

Source: JICA Survey Team

Therefore nearly 150,000 people coming into Bagan every month, even though this number does not include those coming by ordinary vehicles (sedan) and this should not be underestimated by their impact to tourism. It is also important to monitor the increasing number of vehicles not only tourism related buses, but also more than 200~300 large trailers (12 wheels) go through Bagan every month.

2) Intra-city Road

Although major inter-city roads are constructed and maintained by the private concessionaire under the BOT scheme, however township development council is responsible for the roads inside township, of which most of roads are unpaved in Bagan. In New Bagan, main roads in front of hotels are unpaved and became a critical problem for access.

In addition, the safety of tourists walking or traveling by bicycle is jeopardized due to inadequate demarcations for pedestrians, cyclists and vehicles.

3) Bus Terminal

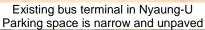
Inter-city bus connects Bagan with mainly Yangon and Mandalay. The travel time between Yangon and Bagan by bus is approximately 14 hours and 13 bus companies are currently operating. The return fare is USD 40. While travel duration between Mandalay and Bagan by bus is approximately 10 hours and 6 bus companies are currently operating. The return fare is USD 35.

The relocation work of the existing bus terminal was completed in April 2014 and started operating in May 2014. In accordance with this completion, the development of the surrounding area of the bus terminal is progressing, with the completion of a nearby hotel. This new bus terminal project is carried out by the private company which is the same company as the above-mentioned BOT based road and tollgate management project.

Since the location of the new bus terminal is at the area before entering Nyaung-U Town, the traffic caused by large buses going to the city center can be reduced. Also the fact that New Bagan and Old Bagan can be accessed without having to pass the center of Nyaung-U Town

can improve the flow of large buses within the archaeological zone. Especially during the festival celebrating full moon in January and October, as well as the holiday season from February to May, the flow of the local tourists visiting Bagan using large buses can be separated from tourists visiting by planes and boats.







Offices of bus companies



Existing bus terminal located near the trunk road. Shwe Zi Gone Pagoda

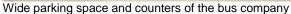
In the future, new regulations and improvement in bus circulation from the bus terminal to the archaeological zone and hotels in Old Bagan will be necessary.

The new bus terminal is in a sufficient location to reduce traffic to the urban area compared to the previous location in Nyaung-U town, though it is now difficult for tourists to access on foot easily.





Administrative office in bus terminal





New Bus terminal almost completed



Gas station is constructed besides of bus terminal



Hotel under construction in front of bus terminal.

Development of bus terminal is a condition for permission for hotel construction

(4) Railway

Nyaung-U railway station is located at the outskirts of Nyaung-U Town. Nyaung-U railway station is on the spur line of Yangon-Mandalay Railway which is the truck line of Myanmar Railway. Nyaung-U railway station connects with Yangon-Mandalay Railway through Taungdwinggyi at Pyinmana. There are 8 trains a day connecting both Yangon and Mandalay.

Foreign tourists use special express trains connecting Bagan with Yangon via Kyaukpadaung as well those connecting Bagan with Mandalay. These are night trains and operate twice in the night. The special express has a cabin with a bed. Trains spend 17.5 hours between Bagan and Yangon and 7.5 hours between Bagan and Mandalay. The fare is MMK 16,500 for a special express cabin to Yangon, while its MMK 2,900 for an upper class of express to Mandalay.

Railway passengers in Nyaung-U railway station totaled to 160,000 passengers in 2009 and were at its peak, then declined to 74,000 passengers / year in 2013. This may be so because of the increase of inter-city bus services which are cheaper, faster and more convenient than railway. 1,200 tourist passengers/year (or 3 passengers/day) in 2012 at its peak, which is small compared to the 196,000 of foreign tourist in 2012 and about 0.6% of the transport mode of Bagan.



Nyaung-U Railway Station (Established in 1996)



Home and Truck

There is a new railway project connecting Bagan with Kyaukpadaung, which provides a steam locomotive train with three coaches to attract tourists to Mount Popa via Kyaukpadaung. Myanmar Railway has already invited expression of interest (EOI) from private companies. Deadline was 7 May 2014. This project is expected to release excess stress on heritage in Bagan through mitigating concentration of tourists. The Myanmar Railway expects to extend the steam locomotive train service to Mandalay in future, if the first project succeeds.

(5) ICT Facilities

1) Internet Connection

According to the interview survey with Myanmar Post and Telecommunication (MPT), almost all hotels and offices have connections via ADSL using telecommunication lines and some hotels own wireless LAN routers. We confirmed that one wireless LAN did not function in a hotel in New Bagan, although the hotel staff said it has a capacity of 5 Mbps.

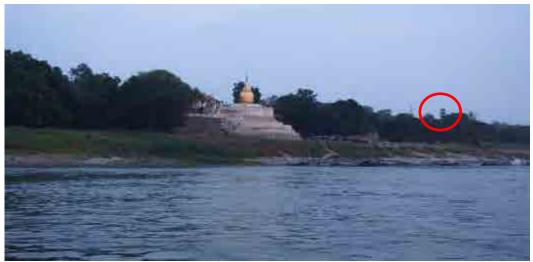
Meanwhile laying optical fiber has already been started in Nyaung-U Township. Currently 15 hotels are connected, followed by 5 more hotels in future. The present server has the maximum capacity of 20 optical fiber connections.

Total uplink bandwidth to Mandalay ISP is 1Gbps. Although any Hotels request to MPT to get

more bandwidth, MPT is possible to provide for each hotel up to 20 Mbps maximum, due to the expensive connection fee in Myanmar (MMK 100,000 / Mbps / month), MPT is currently providing only 4Mbps bandwidth.

It should be noted that, since the connection to the optical fiber has been installed in the New Bagan hotel mentioned above in 1st of May in 2014, work requiring Internet has become much comfortable.

Further, another more than 40 hotels will be required to connect optic fiber cable, so the MPT expects to have certain assistance from Japan.



Tower for mobile phone with base station, inspired by a palm tree for conserving historical landscape



Base station for mobile phone outside of Ancient Site Zone

Optical fiber connection, fiber installation and server utilization cost have to be borne by recipient, so there is limited hotels applied due to relatively higher cost comparing to ADSL.

The cost including connecting optical fiber, execution, fiber and server costs USD 8,000 in case of installation distance: 8 km, speed: estimated at 6 times of ADSL.

2) Telecommunications

Regarding telecommunications, 2G (GSM) 2.5G (CdmaOne), 3G(W-CDMA or Cdma2000) are supported. Most local people connect to the internet via smart phones. For tourists with SIM mobile phones, the data communication fee is very high, and phone needs recharging frequently. Normally such tourists only use telecommunications line while turning off the data communication function.

To preserve historical heritage sites, base stations for telecom companies are not permitted. This results in mobile phone connection only within the coverage area of the towers in Nyaung-U and Old Bagan. Telephone calls for transportation are very limited since routes between districts are rarely covered by those towers. Therefore local people own several SIM cards for each line.

Due to these circumstances, MPT is currently planning to construct another 50 m high tower for base station near the airport for mobile phone and UNESCO is concerned about the degradation of historical landscape.

(6) Water Supply Facilities

Nyaung-U has two pump stations. They take in water from the Irrawaddy River, pass it through sedimentation tanks and supply 3,785 t / day to Nyaung-U Town with the coverage rate of 90% and supply 1,136 t / day to New Bagan Town with the coverage rate of 80%.

The function of clean water treatment facility is to pump 350,000 gallons (1,591 m³) per day from the river by water pumps and to store 150,000 gallons (682 m³) of water through a settling pond to the water tank. However, pressure is low since water is distributed to houses of Nyaung-U Town by gravity; thus the percentage of non-revenue water is also low (20%). On the other hand, 800,000 gallons of water (3,637 m³) is stored in a water tank and by 286 hp pump supplied to 98 villages. Currently not utilizing of any chemicals for sterilization of water, and the water quality test is held only once a year at each location.

The place where no water supply is available, usage of 45 - 100 m deep wells is a common practice especially for hotels to fill in the swimming pool in New Bagan Town.

In the future, following the increase of population (as well as tourists), insufficient water supply or water quality management might be an issue, but the possibility of handling with the current infrastructure will be examined.



Pump station No.1

After pumping up from the river, it will be pumped up to pump station No2.



Pump station No.2

After sending water to settlement basin, water will be delivered to towns and villages.

Meanwhile, this region has a traditional water supply system of collecting rainwater by catchment. Major water supply system developed during the Bagan period in 11th Century AD; collecting water at the base of the mountain where Tuyin Taung Pagoda is erected on the top, connecting through two reservoirs by sandstone channel to the Palace in Old Bagan.

Even now, this water supply system that uses water reservoir is still functioning, although due to technology progress of inexpensively drilling deep wells, people started to stop using reservoir water supply system.

If in the future, most regions start having their own deep wells, it might lead to depletion of the aquifer as well as ground sinking that might impact to the heritage sites; thus it is significant to keep using rainwater. Therefore, it is necessary to plan the strategy for the mid-long term plan of restoring the ancient reservoir water supply system as it can be a new tourism product, in parallel with constructing new water supply system with modern technology.



Water reservoir built in the 13th century at Min-nan-thu Village (37mX37 mX4mH).

Dried-up during dry season, so only being used in rainy season

Holding basin on the other side of the brick wall that uses gradient of land topography.

The mechanism is very natural: water flows into the reservoir after being filtered by porous rocks.

(7) Sewage and Drainage Facilities

There is no facility regarding sewage and drainage system in Nyaung-U Town and New Bagan Town. Hotels handle this situation by setting up their own septic tanks. Indeed, there are complaints of odour, even 5 star-hotel.

(8) Waste Facilities

3 tons of waste in Nyaung-U and 2 tons in New Bagan are collected every day. Collection rate is 60%. The Township Development Committee owns 6 waste vehicles (not compressor). In Old Bagan and other districts there is no collection service, so residents dispose of the waste by themselves. It is observed that some people discard the waste directly into the river or it is washed with rainwater into the Irrawaddy River.





An open landfill near the Nyaung-U

Compact Vehicles to collect garages

Nyaung-U Town and New Bagan Town each have open landfills. The one in Nyaung-u Town is located 5 km south from the city center of Nyaung-U, which covers an area of 31ha and will be functional until 2023. The other in New Bagan Town located 2 km south from center of New Bagan Town, which covers an area of 8ha and will be functional until 2017. There is reserve land for future expansion around each landfill site.

For small amounts of garbage, hotels carry them to landfills with their own trucks. For the large amounts, there is collection service on request. Collection fee for each trip is MMK 35,000. There are 3-4 requests in a week in high season, and once in a week during the low season.

(9) Power-related Facilities

Population in Nyaung-U District is 279,000 of which approximately 40,000 reside in Nyaung-U Town. Electricity is not widely available outside the downtown area. The Electrification rate for each town is shown below.

| Tow | Population | Number of Households | Electrification Rate |
|--------------|------------|-------------------------|-------------------------|
| Nyaung-U | 39,728 | 7,154 | 17.98% |
| Bagan | 12,442 | 2,884 | 23.18% |
| Nga Tha Yaut | 7,972 | 1,323 | 15.37% |
| Total | 60,192 | 11,017 | 16.52% |

Table 2.20 Electrification Rate for Each Township

The Electrification rate is 16% in Nyaung-U Town which is fairly low. The reason for the low electrification rate is primarily due to the dispersed location of villages in the archaeological zone, hence its difficult to set-up a distribution network freely in this area. This number is

expected to rise up to 22%. Demand for power substantially increases in the peak seasons, and hence blackout may frequently occur.

Currently (2014), 11 MWh of electricity is consumed on average (5.5 MW: Nyaung-U Town and Old Bagan, 2.5 MWh: New Bagan Town, 3 MWh: Kyaukpadaung). There are three substations in Nyaung-U Township: two in Nyaung-U Town (three feeders supplying 3 segments) and one in New Bagan Town (three feeders supplying 3 segments including one specifically to Aureum Palace Hotel). The main 66 KVA cables are coming from Chauk (132 KVA) in the south and Myinchan (132 KVA) in the east. One of them does not have a record of power consumption since it was used as a water station in 1992. Another was established in 2014.

The following photographs show three substations in Bagan:



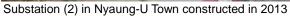
Substation (1) in Nyaung-U Town established in 1989, thus only three feeders are currently operational.



Substation (1) in Nyaung-U Town

According to the book recorded by a caretaker of the substation, the main causes of the black-out are as a result of the problems that occurred in Chauk substation. There are few times when electrical failures have occur every month and usually sustained for 1 – 5 minutes, but there hasn't been any critical problem so far. However, the design load of hotels is not adequately arranged, and will create black-outs after its over loaded by AC utilized in all hotel rooms. Furthermore, in order to continue providing electricity in the hotels, the generators which are used to meet the maximum capacity level in peak season (unnecessarily large) will be used. However, these consume a large amount of diesel and thus it is unavoidable to raise the accommodation fees.

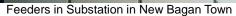






Substation (2) in Nyaung-U Town There are new feeders.







Substation in New Bagan Town

Location of infrastructure and heritages are show in the following Figure.

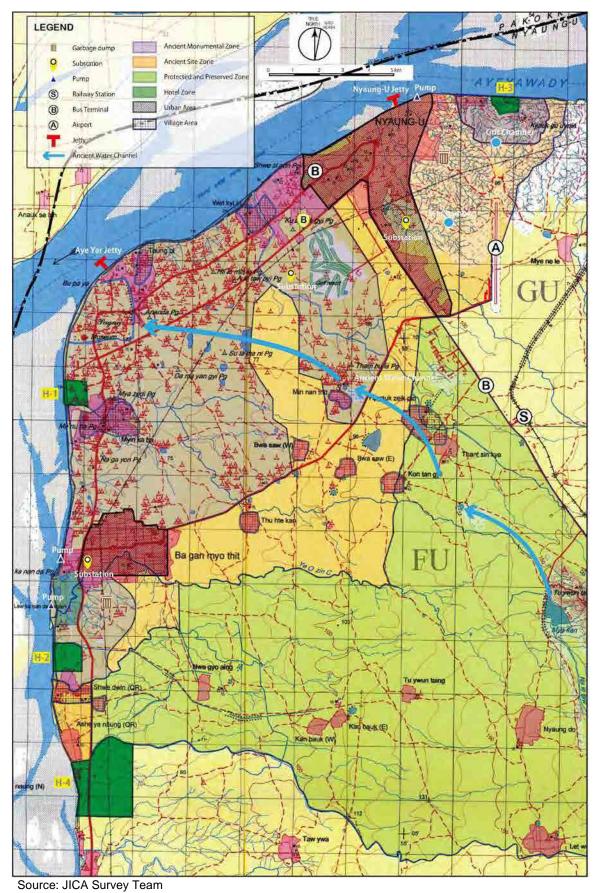


Figure 2.6 Location of Infrastructure and Heritages

2.4 Tourism HRD

2.4.1 HRD in Tourism Administration and Tourism Related Sectors

(1) Tourism Administration Officers and Tourist Information Staff

In Bagan, the number of visitors and the size of tourism industry are rapidly expanding. Tourism administration officers are expected to promote and steer appropriate tourism development by avoiding negative impacts caused by tourism and maximizing socio-economic benefit to local residents, in accordance with the national tourism policies in place including "Responsible Tourism", "Community Involvement in Tourism" and "Myanmar Tourism Master Plan 2013-2020". However, the officer and staff seem have insufficient necessary knowledge and experience, as well as in communicating with relevant tourism stakeholders.

Following the structural reform of MoHT and abolition of direct operation of tours, the tourist information staff seems unprepared to handle the new role of delivering necessary tourist information to the increasing FIT.

(2) Hotels, Motels and Guest Houses

As of 2013, 77 hotels (including motels and guest houses) that can accommodate foreign visitors are in operation in Bagan. The total number of rooms has reached 2,386. They are classified into 5 grades: 4-star, 3-star, 2-star, 1-star and unrated hotels. The number of 4-star and 3-star hotels account for 15%, 2-star and 1-star for 15% and unrated 70%.

According to interviews, the number of employees in 4-star and 3-star hotels ranges between 1.5 and 2.0 per room. Similarly, the number of employees per rooms is between 1.0 and 1.5 per room for 2-star and 1-star, and less than 1.0 per room for unrated hotels²¹. Although reliable statistics are not available, the total number of employees in hotels in Bagan was estimated between 3,000 and 3,500.

Table 2.21 Number of Employees in Hotels in Bagan

| Hotel | Ctor | Booms | Employees | Datia | Guests | (2013) | Type | s of Guest | ts (%) |
|-------|------|-------|-----------|-------|---------|------------|------|------------|--------|
| Hotel | Star | Rooms | Employees | Ratio | Myanmar | Foreigners | G | F | В |
| Α | 4 | 114 | 230 | 2.0 | 842 | 1,1753 | 60% | 40% | 0% |
| В | 3 | 68 | 150 | 2.3 | 1,720 | 12,407 | 60% | 40% | 0% |
| С | 3 | 84 | 160 | 2.0 | 676 | 10,214 | 60% | 40% | 0% |
| D | 3 | 50 | 70 | 1.4 | 585 | 3,482 | 40% | 55% | 5% |
| Е | 2 | 60 | 40 | 0.7 | 630 | 2,829 | 80% | 18% | 2% |
| F | 2 | 44 | 86 | 2.0 | 472 | 2,053 | 70% | 30% | 0% |
| G | 2 | 21 | 35 | 1.7 | 249 | 1,666 | 60% | 40% | 0% |
| Н | 1 | 30 | 40 | 1.4 | 496 | 1,899 | 50% | 45% | 5% |
| I | 0 | 26 | 8 | 0.4 | 360 | 435 | 0% | 70% | 30% |
| J | 0 | 21 | 10 | 0.5 | 0 | 2,147 | 0% | 50% | 50% |
| K | 0 | 35 | 11 | 0.4 | 166 | 2,755 | 10% | 0% | 90% |

Note: G: Group Tourists, F: FIT, B: Backpackers

Source: Each hotel based on interview made by JICA Survey Team, MoHT

Except for the hotel managers who are mostly university graduates, almost all employees

²¹ Compared to the international standard, the number of employees per hotel room is proper.

including supervisors are locally appointed from within Bagan and its surrounding areas are not university trained. Since no hotel and tourism school has been established in Bagan, most of them are graduates from ordinary high-schools. After introductory in-house training and certain probationary period, they are appointed as regular employees. During that period, OJT and monitoring-evaluation are repeated by the supervisors. Some hotels organize in-house training sessions during the low seasons between May and September. However, out-sourcing training to hotel and tourism schools is uncommon and is only done in a few hotels in Yangon or Mandalay²². In general, as the hotel grade decreases, training opportunity and frequency decrease. In unrated hotels, mostly those family run, training opportunity is only limited to OJT.

Table 2.22 Education System in Myanmar

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Source: Ministry of Education (MOE)

From the observations, the level of hospitality, language skill, attitude toward the guests, etc. differs from one employee to another. The team work spirit that may help such insufficiencies among them or by supervisors aren't taken into account.







For both locally based and branch hotels, a majority of hotel managers are dispatched from other cities such as Yangon based on experience and capacity. In comparison with Yangon, information on the latest technology or marketing approaches is limited in Bagan. As a result, cooperation for local tourism promotion and business innovation seems insufficient. This is

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²² Staff training in service including in-house training and out-sourcing is called as "Off-the-job Training", comparing to "On-the-Job Training".

depicted from the low participation rate of Myanmar Hotel Association (MHA) activities in Bagan, only 10 active members among 77 in total.

(3) Travel Agencies and Tour Operators

Travel agencies and tour operators in Bagan are mostly branches of those headquartered in Yangon for arranging local tour guides, cars and local tours, or small-scaled ticketing for airlines, river cruises, etc.

According to the MoHT Bagan Office, 22 travel agents are registered in Bagan, but it goes up to 40 to 50 firms including under registration and working at Bagan with registration in Yangon.²³

(4) Tour Guides

In Myanmar, tour guide are licensed from MoHT through 8-week training and final examination. The guide training is held 2 to 3 times a year, but only in Yangon. About 100 trainees attend the training each session, and around 90% pass the examination.

As of 2013, there are 3,677 national licensed tour guides. A breakdown by language is shown in the table below. About 60% are English speaking guides. Among 40% remaining guides, Japanese speaking guides are the most (403 guides and 11% of the total).

Table 2.23 Registered Tour Guides in Myanmar (National License)

| Language | Number |
|----------|--------|
| English | 2,187 |
| Spanish | 111 |
| Japanese | 403 |
| French | 277 |
| Chinese | 132 |
| Thai | 132 |
| German | 264 |
| Italian | 68 |
| Russian | 64 |
| Korean | 29 |
| Total | 3,667 |

Source: Ministry of Hotels and Tourism (MoHT), 2013

In Bagan, 130 national licensed tour guides are registered as "station guides" by Myanmar Tour Guide Association (MTGA). Furthermore, 108 regionally licensed guides are in Bagan, among whom only around 40 are practically working. The remaining 60 comprise high school teachers or self-employed who aren't fully engaged as tour guides²⁴.

Regionally licensed tour guides were trained in October 2013 by an initiative of MoHT in order to cope with the increasing number of visitors to Myanmar. The training was conducted for 2 months (6 hours per day). The total number of trainers was about 30 comprising staff of MoHT, MTGA, MHA and MRA as well as Bagan DOA, MoCul, lecturers of Pakokku University

²³ According to the interview survey, registration needs humble procedure with time and cost even less benefits, which are the constraint of registration in Bagan.

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²⁴ The guide working in Bagan is deemed to be from Bagan except few moved from other town for their marriage.

(geography, history and architecture), etc.

MTGA in Bagan includes only members who possess a national license. None of 108 regionally licensed tour guides has registered with MTGA in Bagan at the time²⁵.

Most group tours are accompanied by a nationally licensed "through guide" from Yangon. The "station guides" in Bagan are usually employed upon the request of FIT at the front counter or concierge desk at hotels. In some cases, they are appointed by travel agencies in Yangon for attending the group tours without the use of "through guides".

For example, Bagan office of French travel agent "Exotissimo" has about 30 station guide under an exclusivity contract. According to the manager in Bagan, Yangon Office orders Bagan office to arrange station guide and car for small group and FIT. The Bagan office also hires 10 guides in the peak period, who takes care of airport transportation service as a junior guide.

Regarding foreign language, there are 5 station guides who can speak Japanese in Bagan. They are English guide as well because demand on Japanese is not yet sufficient. The Exotissimo, having many French tourists, uses the through guide from Yangon if the tourists require frequent French guide.

Japanese travel agent in Bagan has 2 station guides who can speak Japanese under exclusive contract. Since Japanese guide cannot be substituted by English Guide, Japanese guide is sometimes short in the very peak period in the high season, however number of Japanese guide should leave the market since demand on Japanese guide is not high in all seasons²⁶. Efficient network of Japanese guide in Myanmar supplement the shortage of Japanese guide in certain region in certain period.

(5) Other Tourist Services and Local Residents

The Myanmar Restaurant Association in Bagan (MRA) was established in 2011. 72 joined MRA out of approximately 100 restaurants in Bagan. Most of them are regarded as small and medium enterprise (SME)'s run by family members. About 10 members are active. MRA has set up a fund and organizes periodical training programs.

There were 251 participants in the 4-week "Food and Beverage (F&B) Training" organized by MRA last year. In addition, 19 members joined in the study tour to visit restaurants in Yangon.

Among the restaurants that targeted mainly for tourists, some of them provide attractive tourist activities such as tour guides or information service, participatory cooking classes of traditional Myanmar food, etc.

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²⁵ The regionally licensed guide has no requirement to register MTGA at this moment.

²⁶ According to the interview to YMCA at Mandalay, YMCA has 100 students who studies preliminary and intermediate courses of Japanese. As tourist guide, he/she needs to have at least grade 2 of Japanese test, so students in the preliminary course needs two year. There are 7 to 8 institutes teaching Japanese in Mandalay like JME, Mandalay Foreign Language Collage. Myanmar-Japan Human Resource Development Center plans a tourist guide course. According to the program, it aims at training "junior guide" like Exotissimo who can take care of airport transportation service, which is no relation with the guide license of MoHT. There is no Japanese school in Bagan.

In Bagan, local residents are engaged in various tourist services including horse cart driving, handicraft production and sales, sand painters, traditional performances such as puppet shows, etc.

In the surrounding villages of Bagan, tourists can observe and participate in traditional Burmese life including cotton weaving practice, palm sugar production, cigar using corn husks, peanut oil squeezing, etc.

On the other hand, some undesirable aspects for tourism promotion are occasionally seen. These included pestering child postcard sellers, fake souvenirs, inappropriate solid waste management in the surrounding villages, etc.

The following table indicates producing districts of major vegetables available at Nyaung-U market. Most of hotels in Bagan purchase these vegetables.

Table 2.24 Producing Districts of Vegetables at Nyaung-U Market

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Source: Nyaung-U Market interviewed by JICA Survey Team







Bagan receives 200,000 foreign visitors a year, the same number as population. Despite the dry climate, people here have great opportunity to get benefit from tourism by supplying safe and fresh ingredients to hotels and restaurants.

2.4.2 Curriculum and Materials used for Tourism HRD

As a member state of ASEAN, common curriculum and training materials of ASEAN are widely used in Myanmar. Outlines are as described below.

(1) ACCSTP (ASEAN Common Competency Standard for Tourism Professionals)

To guarantee the quality of tourist service, ACCSTP regulates the minimum competency standard that all the hotelier and tour companies in ASEAN member states need to abide by.

For a hotelier, common competencies are divided into 4 divisions of labor: front office, house keepers, food and beverage service, and food production. For tour companies, 2 divisions of labor are included: travel agency and tour operator.

Table 2.25 6 Labor Divisions and 32 Job Titles defined in ACCSTP

| | Hotel S | Services | | Travel S | Services |
|---|---|--|---|--|---|
| Front Office | Housekeeping | F&B | Food | Travel Agencies | Tour Operation |
| | | | Production | | |
| Front Office Manager Front Office Supervisor Receptionist Telephone Operator Bell Boy | Executive Housekeeper Laundry Manager Floor Supervisor Laundry Attendant | F&B Director F&B Outlet Manager Head Waiter Bartender Waiter | Executive Chef Demi Chef Commis Chef Chef de Partie Commis Pastry | General Manager Assistant General Manager Senior Travel Consultant Travel | Product Manager Sales and Marketing Manager Credit Manager Ticketing |
| | Room AttendantPublic Area | | Baker Butcher | Consultant | Manager • Tour Manager |
| | Cleaner | | | | |

Source: ASEAN Secretariat

(2) CATC (Common ASEAN Tourism Curriculum)

Based on ACCSTP, CATC was developed apply to training institutions in ASEAN member states in cooperation with the Australian Government.

(3) MRA (ASEAN Mutual Recognition Arrangement)

MRA is an agreement among ASEAN member states for assuring free flow of tourism professionals in the 6 divisions of labor defined in ACCSTP. Myanmar has also signed this agreement. To apply the free flow of tourism professionals, it is necessary for the training programs to satisfy the curriculum defined in ACCSTP and assess the training results obtained by each TPCB (Tourism Professional Certification Board) established under MRA.

In Myanmar, TPCB and NTPB (National Tourism Professional Board) have already been established in accordance with MRA. However, both TPCB and NTPB haven't been effectively working. Those who have finished ACCSTP curriculum can't get certificate at TPCB for the moment.

For making MRA effective, the ASEAN Secretariat has already developed 144 units of toolboxes in English in accordance with ACCSTP for all the 4 divisions of labor for hoteliers. Remaining 98 toolboxes for the 2 divisions of labor for tour companies are currently under production. Each toolbox includes 3 manuals for trainers, trainees and assessors as well as training material for trainers in a form of power point files.

Table 2.26 List of Toolboxes under MRA

| Read and interpret basic instructions, directions and/or diagrams Receive and resolve customer complaints Receive and store kitchen supplies and food stock Work effectively with colleagues and customers Work in a socially diverse environment XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | No. | Title | FO | HK | F&B | FP | TA | ТО |
|---|-----|--|----|----|----------|----|----|----|
| Clean and maintain kitchen equipment and utensils | 1 | Access and retrieve computer-based data | х | х | Х | Х | Х | х |
| 4 Communicate on the telephone | 2 | Apply standard safety procedures for handling foodstuffs | | | Х | Х | | |
| 4 Communicate on the telephone | 3 | Clean and maintain kitchen equipment and utensils | | | Х | Χ | | |
| 6 Develop and update local knowledge | 4 | | Х | Х | Х | Χ | Х | Х |
| 6 Develop and update local knowledge | 5 | ······································ | X | Х | Х | Х | | |
| Minitarin hospitality industry knowledge | 6 | | X | Х | Х | Х | X | Х |
| 8 Maintain hospitality industry knowledge | 7 | | X | Х | Х | Х | X | |
| 9 Manage and resolve conflict situations | 8 | | X | Х | Х | Х | | |
| 10 Organize and prepare food products and services | 9 | | | Х | · | | X | Х |
| 11 | | | | | · | | | |
| Perform basic First Aid procedures X | 11 | | X | Х | † | | X | Х |
| Read and interpret basic instructions, directions and/or diagrams Receive and resolve customer complaints X | 12 | | | Х | Х | | X | Х |
| diagrams Receive and resolve customer complaints Receive and store kitchen supplies and food stock Work effectively with colleagues and customers X X X X X X X X X X X X X X X X X X X | 13 | | | | | | | |
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| 35 Present and display food products x 36 Select, prepare and serve special cuisines x 37 Select, prepare and serve various cheeses x 38 Apply catering control principles and procedures x 39 Design a concept for a major event or function x 40 Design meals to meet specific dietary or cultural needs x 41 Design meals to meet specific market requirements x 42 Operate a fast food outlet x 43 Prepare tenders for catering contracts x 44 Select catering systems x 45 Manage and operate a coffee shop x 46 Prepare and display petits fours x 47 Prepare and display sugar work x 48 Prepare and model marzipan x 49 Prepare chocolate and produce chocolate products x 50 Present desserts x | | | | | | | | |
| 36 Select, prepare and serve special cuisines x 37 Select, prepare and serve various cheeses x 38 Apply catering control principles and procedures x 39 Design a concept for a major event or function x 40 Design meals to meet specific dietary or cultural needs x 41 Design meals to meet specific market requirements x 42 Operate a fast food outlet x 43 Prepare tenders for catering contracts x 44 Select catering systems x 45 Manage and operate a coffee shop x 46 Prepare and display petits fours x 47 Prepare and model marzipan x 48 Prepare chocolate and produce chocolate products x 50 Present desserts x | | | | | | | | |
| 37 Select, prepare and serve various cheeses x 38 Apply catering control principles and procedures x 39 Design a concept for a major event or function x 40 Design meals to meet specific dietary or cultural needs x 41 Design meals to meet specific market requirements x 42 Operate a fast food outlet x 43 Prepare tenders for catering contracts x 44 Select catering systems x 45 Manage and operate a coffee shop x 46 Prepare and display petits fours x 47 Prepare and display sugar work x 48 Prepare and model marzipan x 49 Prepare chocolate and produce chocolate products x 50 Present desserts x | | | | | | | | |
| 38 Apply catering control principles and procedures x 39 Design a concept for a major event or function x 40 Design meals to meet specific dietary or cultural needs x 41 Design meals to meet specific market requirements x 42 Operate a fast food outlet x 43 Prepare tenders for catering contracts x 44 Select catering systems x 45 Manage and operate a coffee shop x 46 Prepare and display petits fours x 47 Prepare and display sugar work x 48 Prepare and model marzipan x 49 Prepare chocolate and produce chocolate products x 50 Present desserts x | | | | | | | | |
| 39 Design a concept for a major event or function x 40 Design meals to meet specific dietary or cultural needs x 41 Design meals to meet specific market requirements x 42 Operate a fast food outlet x 43 Prepare tenders for catering contracts x 44 Select catering systems x 45 Manage and operate a coffee shop x 46 Prepare and display petits fours x 47 Prepare and display sugar work x 48 Prepare and model marzipan x 49 Prepare chocolate and produce chocolate products x 50 Present desserts x | | | | | | | | |
| 40 Design meals to meet specific dietary or cultural needs x 41 Design meals to meet specific market requirements x 42 Operate a fast food outlet x 43 Prepare tenders for catering contracts x 44 Select catering systems x 45 Manage and operate a coffee shop x 46 Prepare and display petits fours x 47 Prepare and display sugar work x 48 Prepare and model marzipan x 49 Prepare chocolate and produce chocolate products x 50 Present desserts x | | | | | | | | |
| 41 Design meals to meet specific market requirements x 42 Operate a fast food outlet x 43 Prepare tenders for catering contracts x 44 Select catering systems x 45 Manage and operate a coffee shop x 46 Prepare and display petits fours x 47 Prepare and display sugar work x 48 Prepare and model marzipan x 49 Prepare chocolate and produce chocolate products x 50 Present desserts x | | | | | | | | |
| 42 Operate a fast food outlet x 43 Prepare tenders for catering contracts x 44 Select catering systems x 45 Manage and operate a coffee shop x 46 Prepare and display petits fours x 47 Prepare and display sugar work x 48 Prepare and model marzipan x 49 Prepare chocolate and produce chocolate products x 50 Present desserts x | | | | | | | | |
| 43 Prepare tenders for catering contracts x 44 Select catering systems x 45 Manage and operate a coffee shop x 46 Prepare and display petits fours x 47 Prepare and display sugar work x 48 Prepare and model marzipan x 49 Prepare chocolate and produce chocolate products x 50 Present desserts x | | | | | | | | |
| 44 Select catering systems x 45 Manage and operate a coffee shop x 46 Prepare and display petits fours x 47 Prepare and display sugar work x 48 Prepare and model marzipan x 49 Prepare chocolate and produce chocolate products x 50 Present desserts x | | | | | | | | |
| 45 Manage and operate a coffee shop x 46 Prepare and display petits fours x 47 Prepare and display sugar work x 48 Prepare and model marzipan x 49 Prepare chocolate and produce chocolate products x 50 Present desserts x | | | | | | | | |
| 46 Prepare and display petits fours x 47 Prepare and display sugar work x 48 Prepare and model marzipan x 49 Prepare chocolate and produce chocolate products x 50 Present desserts x | | | | | | | | |
| 47 Prepare and display sugar work x 48 Prepare and model marzipan x 49 Prepare chocolate and produce chocolate products x 50 Present desserts x | | | | | | | | |
| 48 Prepare and model marzipan x 49 Prepare chocolate and produce chocolate products x 50 Present desserts x | | | | | | | | |
| 49 Prepare chocolate and produce chocolate products x 50 Present desserts x | | | | | | | | |
| 50 Present desserts x | | | | | | | | |
| | | | | | | | | |
| 51 Prepare and present gateaux, torten and cakes x | | Prepare and present gateaux, torten and cakes | | | | | | |

| No. | Title | FO | HK | F&B | FP | TA | TO |
|-----|---|----|----|-----|----|----|----|
| 52 | Prepare and produce cakes and pastries | | | | Х | | |
| 53 | Prepare and produce yeast goods | | | | X | | |
| 54 | Prepare bakery products for patisserie | | | | Χ | | |
| 55 | Clean and tidy beverage and food service areas | | | Х | | | |
| 56 | Develop and maintain food & beverage product knowledge | | | Х | | | |
| 57 | Manage responsible service of alcohol | | | Х | | | |
| 58 | Operate a bar facility | | | Х | | | |
| 59 | Operate a cellar system | | | Х | | | |
| 60 | Prepare and serve cocktails | | | Х | | | |
| 61 | Prepare and serve non-alcoholic beverages | | | Х | | | |
| 62 | Process liquor sales at a bar facility | | | Х | | | |
| 63 | Provide a link between kitchen and service area | | | Х | | | |
| 64 | Provide advice to patrons on food and beverage services | | | Х | | | |
| 65 | Provide gueridon service | | | Х | | | |
| 66 | Provide food and beverage services | | | Х | | | |
| 67 | Provide room service | | | Х | | | |
| 68 | Provide silver service | | | Х | | | |
| 69 | Serve a range of wine products | | | Х | | | |
| 70 | Take food orders and provide table service | | | Х | | | |
| 71 | Develop a marketing strategy and coordinate sales | X | Х | Х | Χ | Х | Χ |
| | activities | | | | | | |
| 72 | Establish and maintain a business relationship | х | Х | х | Χ | х | Χ |
| 73 | Maintain quality customer/guest service | х | х | Х | Х | х | Χ |
| 74 | Develop and implement a business plan | Х | Х | Х | Χ | х | Χ |
| 75 | Develop new products and services | | | Х | Х | | |
| 76 | Produce documents, reports and worksheets on a computer | Х | Х | х | Х | х | Х |
| 77 | Gather and present product information | х | х | Х | Х | | |
| 78 | Maintain a paper-based filing and retrieval system | Х | х | Х | Х | | |
| 79 | Manage and implement small projects | х | х | Х | Х | | |
| 80 | Monitor and maintain a business computer system | Х | х | Х | Х | х | Χ |
| 81 | Plan and establish systems and procedures | Х | Х | Х | Χ | х | Χ |
| 82 | Plan, manage and conduct meetings | Х | Х | Х | Χ | х | Χ |
| 83 | Prepare business documents | Х | Х | Х | Х | Х | Х |
| 84 | Use common business tools and technology | х | Х | Х | Х | Х | Х |
| 85 | Work cooperatively in a general administration environment | Х | Х | Х | Х | | |
| 86 | Develop and implement operational | Х | Х | Х | Х | Х | Х |
| 87 | Audit financial procedures | х | Х | Х | Χ | Х | Х |
| 88 | Maintain financial standards and records | Х | Х | Х | Х | | |
| 89 | Manage financial performance within a budget | х | Х | Х | Х | Х | Х |
| 90 | Manage payroll records | Х | х | Х | Х | | |
| 91 | Monitor catering revenue and costs | | | Х | Х | | |
| 92 | Evaluate the effectiveness of an assessment system | Х | Х | Х | Х | | |
| 93 | Manage an assessment system for training outcomes | Х | Х | Х | Х | | |
| 94 | Monitor and evaluate the effectiveness of training outcomes | Х | Х | Х | Х | | |
| 95 | Plan, conduct and evaluate a staff performance | Х | Х | х | Χ | х | Х |
| | assessment | | | | | | |
| 96 | Plan and implement a series of training events | Х | Х | Х | Х | | |
| 97 | Prepare and deliver training sessions | Х | Х | Х | Χ | Х | Χ |
| 98 | Develop and supervise operational approaches | Х | Х | Х | Χ | | |
| 99 | Lead and manage people | | | Х | Х | Х | Χ |
| 100 | Manage legal requirements for business compliance | Х | Х | Х | Х | Х | Х |
| 101 | Manage physical assets and infrastructure | Х | Х | Х | Х | Х | Х |
| 102 | Manage special events | Х | Х | Х | X | | |

| No. | Title | FO | HK | F&B | FP | TA | TO |
|-----|--|----|---------|-----|----|--------|---------|
| 103 | Manage stock purchases and inventory | х | х | х | х | х | х |
| 104 | Manage the effective use of human resources | Х | х | Х | х | | |
| 105 | Monitor staff performance | Х | Х | Х | Х | Х | Х |
| 106 | Provide professional support to business colleagues | Х | х | Х | х | | |
| 107 | Recruit and select staff | Х | х | Х | Х | Х | Х |
| 108 | Roster staff | Х | Х | Х | Х | | |
| 109 | Converse in English at a basic operational level | Х | Х | Х | х | Х | Х |
| 110 | Respond to instructions given in English | Х | х | Х | Х | | |
| 111 | Start conversations and develop good relations with guests | Х | Х | Х | Х | | |
| 112 | Communicate in English on a telephone | Х | Х | Х | Х | | |
| 113 | Use oral English to convey a complex exchange of ideas | Х | Х | Х | Х | | |
| 114 | Deliver a short oral presentation in English | Х | Х | Х | Х | | |
| 115 | Read and write English at an advanced level | X | Х | Х | Х | X | Х |
| 116 | Read general information texts or media | X | Χ | Х | Х | | |
| 117 | Write a short message in English | X | х | Х | Х | | |
| 118 | Prepare a business letter in advanced English | X | Х | Х | Х | | |
| 119 | Develop and update tourism industry knowledge | X | Χ | | | X | Х |
| 120 | Promote products and services to customers | X | Х | Х | Х | X | Χ |
| 121 | Operate a computerized reservation system | X | | | | X | |
| 122 | Provide accommodation reception services | Х | | | | | |
| 123 | Maintain guests' financial records | Х | | | | | |
| 124 | Process a financial sale transaction | Х | Х | х | Х | X | Х |
| 125 | Conduct a night audit | Х | | | | | |
| 126 | Provide Bell Boy/Porter services | Х | | | | | |
| 127 | Operate a (PABX) switchboard | X | | | | | |
| 128 | Receive and place in-coming phone call | X | | | | | |
| 129 | Facilitate out-going phone calls | X | | | | | |
| 130 | Provide information about in-house services | Х | | | | | |
| 131 | Provide international (IDD) service information | X | | | | | |
| 132 | Provide housekeeping services to guests | | Χ | | | | |
| 133 | Clean public areas, facilities and equipment | | Х | | | | |
| 134 | Clean and prepare rooms for in-coming guests | | Χ | | | | |
| 135 | Maintain and operate an industrial laundry | | Χ | | | | |
| 136 | Launder linen and guests' clothes | | Х | | | | |
| 137 | Provide valet services to guests | | Χ | | | | |
| 138 | Clean and maintain industrial work area and equipment | | Χ | | | | |
| 139 | Establish and maintain a safe and secure workplace | X | Х | х | Х | | Х |
| 140 | Maintain the security of premises and property | X | Χ | | | | |
| 141 | Operate basic security equipment | X | Χ | | | | |
| 142 | Maintain the safety of premises and personnel | χ | X | | | | |
| 143 | Observe and monitor people | X | X | | | | |
| 144 | Provide for the safety of VIPs | X | X | | | | |
| 145 | Manage intoxicated persons | X | X | Х | | ······ | |
| 146 | Escort, carry and store valuable items | X | X | | | | |
| 147 | Provide a lost and found facility | X | X | | | | |
| 148 | Plan and conduct an evacuation of premises | X | X | | | | |
| 149 | Organize functions | X | X | Х | X | | |
| 150 | Prepare and deliver a presentation | χ | X | Х | X | X | Х |
| 151 | Follow safety and security procedures | | | | | X | X |
| 152 | Access and interpret product information | l | | | | X | |
| 153 | Administer a billing and settlement plan | | | | | X | |
| 154 | Apply advance airfare rules and procedures | | | | | X | |
| 155 | Book and co-ordinate supplier services | | | | | X | |
| | 4 | A | | | ٠ | L | |

| No. | Title | FO | HK | F&B | FP | TA | TO |
|-----|--|----|----|-----|----|----|----|
| 156 | Construct and ticket a non-air travel plan | | | | | х | |
| 157 | Construct and ticket domestic airfares | | | | | х | |
| 158 | Construct and ticket promotional international airfares | | | | | х | |
| 159 | Construct and ticket regular international airfares | | | | | х | |
| 160 | Create promotional display stand | | | | | х | |
| 161 | Maintain product information inventory | | | | | х | |
| 162 | Operate an automated information system | | | | | х | X |
| 163 | Produce travel documentation on a computer | | | | | х | |
| 164 | Receive and process reservations | Х | | | | Х | |
| 165 | Source and package tourism products and services | | | | | х | Х |
| 166 | Source and provide destination information and advice | | | | | х | |
| 167 | Work as a tour guide | | | | | | Х |
| 168 | Allocate tour resources | | | | | | X |
| 169 | Conduct interpretive activities in the field | | | | | | X |
| 170 | Conduct pre-departure checks | | | | | | X |
| 171 | Co-ordinate and operate a day-tour (or short excursions) | | | | | | X |
| 172 | Demonstrate/observe respect for indigenous cultures | | | | | | X |
| 173 | Drive various types of service vehicles | | | | | | X |
| 174 | Establish and maintain safe touring conditions | | | | | | X |
| 175 | Lead tour groups in a responsible manner | | | | | | Χ |
| 176 | Maintain contacts with handling agents | | | - | | | X |
| 177 | Manage and facilitate an extended tour experience | | | | | | Χ |
| 178 | Plan, develop and evaluate interpretive activities | | | - | | | Χ |
| 179 | Plan, trial and implement minimal impact operations | | | | | | Χ |
| 180 | Prepare and present tour commentaries | | | | | | X |
| 181 | Provide arrival and departure assistance | | | - | | | X |
| 182 | Research and share information on indigenous cultures | | | | | | Χ |
| 183 | Carry out vehicle maintenance or minor repairs | | | | | | Χ |
| 184 | Clean premises and equipment | | | | | | X |
| 185 | Demonstrate climbing skills at a basic level | | | | | | Χ |
| 186 | Develop and implement operational plans | | | | | | X |
| 187 | Develop interpretive content for ecotourism activities | | | | | | X |
| 188 | Drive large tour buses or coaches | | | | | | Χ |
| 189 | Manage and execute a detailed tour itinerary | | | | | | Х |
| 190 | Manage operational risk | | | | | | X |
| 191 | Monitor tourism operations | | | | | | Χ |
| 192 | Maintain tourism vehicles in safe and clean operational | | | - | | | X |
| | condition | | | | | | |
| 193 | Operate and maintain a 4WD vehicle in safe working | | | | | | X |
| | condition | | | | | | |
| 194 | Operate tours in remote areas | | | | | | Χ |
| 195 | Set up and operate a camp site | | | | | | Х |
| 196 | Provide camp site catering | | | | | | X |
| 197 | Apply point of sale handling techniques | | | | | X | Χ |
| 198 | Assess and plan tourism opportunities for local | | | | | Х | Χ |
| | communities | | | | | | |
| 199 | Build and maintain a team approach to service delivery | | | | | Х | X |
| 200 | Construct and apply tourism product research | | | | | Х | X |
| 201 | Co-ordinate production of brochures and marketing | · | | | | Х | X |
| | materials | | | | | | |
| 202 | Create, implement and evaluate strategic product initiatives | | | | | Х | X |
| 203 | Develop and monitor culturally appropriate tourism activity | | | | | Х | Χ |
| 204 | Develop conference programs | | | | | Х | Х |
| • | | • | | | | | |

| No. | Title | FO | HK | F&B | FP | TA | ТО |
|-----|--|----|----|-----|----|----|----|
| 205 | Develop host community awareness programs | | | | | х | Х |
| 206 | Develop, implement and evaluate regional tourism plans | | | | | Х | Х |
| 207 | Develop, implement and evaluate sponsorship plans | | | | | х | Χ |
| 208 | Develop, manage and evaluate local marketing strategies | | | | | х | х |
| 209 | Develop/monitor ecologically sustainable tourism | | | | | х | Х |
| | operations | | | | | | |
| 210 | Implement event management systems and procedures | | | | | Х | Х |
| 211 | Plan and implement sales activities | Х | Х | | | х | Х |
| 212 | Prepare and submit quotations | | | | | Х | Х |
| 213 | Promote tourism products and services | | | | | Х | Х |
| 214 | Create and update a tourism website | | | | | Х | Х |
| 215 | Develop and manage business strategy | | | | | Х | Х |
| 216 | Manage and monitor innovative tourism programs and | | | | | Х | Х |
| | projects | | | | | | |
| 217 | Minimize theft | | | | | х | Х |
| 218 | Receive and store stock | Х | Х | Х | Х | Х | Х |
| 219 | Source and present information | | | | | Х | Х |
| 220 | Interpret financial statements and reports | | | | | Х | Х |
| 221 | Maintain a secure financial accounting system | | | | | Х | Х |
| 222 | Manage contractual agreements/commitments | | | | | х | Х |
| 223 | Manage and control operational costs | | | | | х | Х |
| 224 | Prepare financial statements | Х | Х | Х | Χ | х | Х |
| 225 | Analyze competency requirements | | | | | х | Х |
| 226 | Design and establish a training system | | | | | х | Х |
| 227 | Develop assessment tools and procedures | | | | | х | Х |
| 228 | Implement, monitor and evaluate a training/development | Х | х | х | Х | х | Х |
| | program | | | | | | |
| 229 | Plan and promote training courses | | | | | х | Х |
| 230 | Apply industry standards to team supervision | | | | | Х | Х |
| 231 | Lead and manage a development team | | | | | Х | Х |
| 232 | Manage workplace diversity | х | Х | Х | х | х | Х |
| 233 | Manage and maintain workplace relations | Х | Х | Х | Х | Х | Х |
| 234 | Monitor workplace operations | Х | Х | Х | Х | Х | Х |
| 235 | Prepare and monitor budgets | Х | х | х | Χ | х | Х |
| 236 | Read and write English at a basic operational level | | | | | х | Х |
| 237 | Use English at a supervisory level | | | | | х | Х |
| 238 | Read and write English at a supervisory level | | | | | х | Х |
| 239 | Coach others in job skills | х | х | Х | Х | х | Х |
| 240 | Design, prepare and present various types of reports | Х | Х | Х | Х | | |
| 241 | Perform child protection duties relevant to the tourism | Х | Х | х | Х | Х | Х |
| | industry | | | | | | |
| 242 | Develop protective environments for children in destinations | Х | Х | Х | Х | Х | Х |

Note: FO : Front Office, HK : Housekeeping, FP : Food Production, TA : Travel Agencies, TO : Tour Operation Source: ASEAN Secretariat

In this context, it is appropriate to use MRA toolboxes for tourism industry training under the Project. Additional input depending on specific needs of the country or locality into the curriculum is welcomed. It is desirable to add Myanmar tailored hospitality into the training programs.

2.4.3 Organizations for Tourism HRD

(1) MTF (Myanmar Tourism Federation)

Among 11 sub-organizations under MTF, 2 associations are related to the human resource development. One is Myanmar Hospitality Professionals Association (MHPA) comprised of hotel managers and supervisors. The other is Myanmar Tourism Human Resource Development Association (MTHRDA) comprised of hotel and tourism training schools.

(2) MHPA (Myanmar Hospitality Professionals Association)

MHPA includes 700 hotel managers and supervisors, and aims at improving Myanmar hospitality. There are 12 members in Bagan.

MHPA organizes 1) hospitality training (3 to 4 times annually), 2) seminars (only in Yangon, 4 times in the past), 3) beach tourism training (Ngve Saung beach for this year), and 4) middle management training (1 to 2 times annually, for 2 weeks each).

As a rule, MHPA runs such training programs on an actual expense and voluntary basis, without receiving fees.

MHPA uses MRA toolbox for hospitality training. Basic courses allocate 120 hours: 90 hours for theory and 30 hours for practice. The hospitality training lasts one month, daily 4 hours on average. The training is organized 3 to 4 times annually upon request from hotels. In general, hospitality training is held in low season and OJT mainly in high season.

Trainers are appointed from among MHPA members depending on availability. Larger-scale hotels have a training section and professional in-house trainers.

ASEAN held TOT (ASEAN Master Trainer Training) in Indonesia in 2012. Myanmar dispatched 4 candidates and obtained 4 master trainers, followed by national trainer training in Myanmar that produced 17 national trainers. MHPA retains 1 ASEAN Master Trainer and 8 National Trainers.

Beach tourism training is held not on site, but in Yangon. In case of Hospitality Training, however, it is held on site by dispatching MHPA trainers to the hotels that made requests.

For middle management training, generally, the above-mentioned master trainers make lectures. In the past, MHPA have used training materials developed by an American Hotel Association or invited guest trainers from abroad.

(3) MTHRDA (Myanmar Tourism HRD Association) and Hotel and Tourism Training Centers

MTHRD includes 26 hotels and tourism training schools in the whole country. Currently, hotel and tourism training schools are concentrated in Yangon and Mandalay.

1) Kandawgyi Hotel and Tourism Training Center

Kandawgyi Hotel and Tourism Training Center is one of the oldest hotels and tourism training

schools in Myanmar, established by UNDP in 1982. The hotel was privatized but the school still maintains close relations with MoHT.

Kandawgyi Hotel and Tourism Training Center is a vocational training center, offering short training programs 5 times annually. The short training programs include 8-week training in the center and 4-week internship training outside. The internship training periods differ depending on the courses.

The Hotel section includes 3 levels. Level-1 is composed of 7 courses including front office, housekeeping, foods and beverages, food production (western and Asian), hospitality English, etc. Level-2 is comprised of 3 courses which including; accounting, room division and food and beverage. Level-3 is consists of only a hotel management course.

In addition, Kandawgyi Hotel and Tourism Training Center has a tourism program. This is made up of 2 courses which includes; tour consulting and tour operating, both of which are level-1. The training period for the tourism section is different from that of the hotel section as internship training outside has not been established yet.

The number of training staff is 40, among whom 35 are trainers and demonstrators. In addition, the center has 7 part-time trainers, who are mostly retired MoHT staff.

The Chief Instructor has participated in ASEAN Master Trainer Training in Indonesia, and he is a certified ASEAN Master Trainer and Assessor as well.

The number of students differs depending on recruitment periods. For Level-1, on average, 50 for front office, 40 for housekeeping, 50 for food and beverage, 70 and 30 for food production western and Asian respectively. In Level-2, the number becomes less due to the more advanced effort. 15 to 20 for accounting, 5 for room division, 5 for foods and beverages. This is similar for Level-3. The number of students in the tourism section accounts for about 20 in total.

The tuition fees range from USD 120 for Level-1 to USD 250 for Level-3.

The training curriculum is based on ACCSTP and CATC. MRA toolboxes are used without any modifications. Although some students can't fully grasp English texts, they try to translate the material into the Myanmar language in their minds. If translated manuals are used, there is a possibility that the students would not act as instructed when faced with a real situation. In fact, in Thailand and Laos, this kind of problem was observed. It's earlier recognition is one of the advantages.



PC room: Both old and new models are frequently used.



Tourism class: Hotel classes were holidays at the moment.



Food production practice area: some equipment was outdated.

In Yangon, hotel and tourism training schools directed by Singapore or Thailand counterparts are under development. Myanmar agrees MRA, application of ACCTPA toolbox is a prerequisite. However, it is also important to put additional elements or local approaches to establishing a hospitality standard in the near future for Myanmar.

2) Mandalay Hotel and Tourism Training Center

Mandalay Hotel and Tourism Training Center, annexed to Zegyo Hotel was established as a prominent hotel training center in Mandalay in 2006 in cooperation with MoHT and MHA.

The training center provides 4 basic courses of "Front Office", "Housekeeping", "Foods and Beverages" and "Food Production", as well as an intermediate course. An advanced course has not been established yet.



The class room for front office is light and air-conditioned.



The center has a theater that can accommodate multiple classes.



The trainers' room is equipped with a copy machine.

Around 1,300 graduates were trained in a period of 7 years between 2006 and 2013 (about 200 annually). The training period is 10 weeks (2.5 months) for each course. Four sessions are organized annually. The trainees are from within and around Mandalay including Monywa and Mingyang. However, the trainees from Bagan have been very few. Almost 90% of graduates were able to find jobs. Various hotels in Mandalay make job offers to the center.

The center has 10 permanent trainers and 4 part-time trainers. The latter are retired MoHT officials. One of the permanent trainers is also a former MoHT official. Training materials used in the center are toolboxes of ASEAN MRA.

3) Tourist Service Training in Bagan

MTHRDA also has experience in short training programs for existing hotel employees. In the past, MTHRDA organized a 2-week long TOT program in Bagan.

In Bagan, there are no hotels affiliated to MTHRDA except language schools which bring up tour guides with language lessons. Some newly opened hotels conduct in-house training to their employees for approximately one month with trainers invited from the tourism schools in Yangon before their opening. However, at this moment, private hotel schools are difficult to operate in Bagan from a business perspective compared to the situation at Kandawgyi Hotel and Tourism Training Center, since the demand for the training fluctuates with the season.

(4) Higher Education Related to Tourism

Starting from 2012, tourism departments have been established at National Management College (NMC) in Yangon and Mandalar College in Mandalay. 100 students and 50 students are currently registered respectively.

In NMC, a bachelor course for 4 years (BA in Tourism) and a diploma course for 9 months (DTSM) are in operation. The latter course is jointly supervised by Ministry of Education and MoHT. Both the institutions have just been established. The purpose, targets, curriculum and necessary professors have not been sufficiently consolidated.

2.5 Support Programs by Other Development Partners

2.5.1 Tourism Sector

(1) ASEAN

The 10 member states of Association of Southeast Asian Nations (ASEAN) will form the ASEAN Economic Community (AEC) in 2015. Tourism is regarded as one of the most important economic activities in AEC. ASEAN has already formulated the ASEAN Tourism Strategic Plan (ATSP 2011-2015) and ASEAN Tourism Marketing Strategy (ATMS 2012-2015). All the member states are currently making effort to realize these strategies under initiatives of the ASEAN Secretariat. Priority issues under these strategies are discussed in respective working groups and authorized at ASEAN National Tourism Office (NTO) Meetings held every 6 months in turn. Among the priority issues at NTO meetings are the ASEAN Mutual Recognition Arrangement (MRA) which is related to the Project. MRA concerns tourism human resource development and has produced toolboxes to be applied in the member states. In addition, updating of ASEAN Tourism Standards and development of ASEAN Tourism Products may have some influence in the Project.

MRA aims at improving and standardizing the level of tourism professionals in ASEAN and assuring free flow of tourism professionals within the ASEAN member states. This is expected to contribute to "ASEAN as a One Tourist Destination" which is the target of ATMS.

ASEAN Tourism Standards were enacted by aiming at securing the service quality in the member states. The standards originally included "Green Hotels", "Home Stay", "Spa Service", "Public Toilet", etc. Currently, working groups are discussing their revision as well as additional items such as a "Clean Tourist City", "Community-Based Tourism", etc.

It was agreed among the member states to put common tourism promotion campaigns such as "Southeast Asia – Feel the Warmth" with a logo on all printed materials.

(2) Asian Development Bank (ADB)

ADB is currently conducting a GMS Tourism Promotion Project covering six countries (Myanmar, Thailand, Cambodia, Laos Vietnam and Yunnan, China) of Greater Mekong Sub-Region (GMS). The project includes 13 area-based projects in the priority tourism zones, and 16 theme-based projects covering all the 6 countries. In November 2011, the GMS working group meeting was held in Bagan. In June 2014, GMS Tourism Forum was held in Mandalay.

ADB is preparing a pro-poor tourism project along the East-West Economic Corridor in Eastern Myanmar by using the Japan Fund for Poverty Reduction (JFPR). The project aims at supporting women entrepreneurship in micro, small and medium enterprises. Tourism is an important element of the project. The expected budget is USD 3.0 million.

(3) Luxembourg

Lux-Dev is preparing "Development of Human Resources in the Hotel and Tourism Sector and Capacity Development of the Ministry of Hotels and Tourism (MYA/001)". Currently, the recruitment of a Chief Technical Advisor is being undertaken. The project is expected to start in September 2014 and last for a period of 5 years. Other members apart from the Chief Advisor have already been appointed and are expected to be in Myanmar soon.

The project contains three components: 1) Governance, 2) Education, and 3) Private Sector Support. The former two components are based in Nay Pyi Taw and target the whole country. The last component will directly support HRD of the private sector and target Nay Pyi Taw and Yangon.

Table 2.27 Outlines of Luxembourg Tourism HRD Project

| Component | Tasks | Activities |
|-----------------------------|-------------------------------|--|
| Governance | T1: Support the formation and | T1A1: Prepare roles, responsibilities and continuous |
| | operation of a Training | professional development program for the |
| Direct stakeholders and | Department within MoHT | staff of Training Department |
| beneficiaries: | (also establish a project | T1A2: Establish and support a Training Department |
| Administrators and the | office in Yangon) | advisory group |
| "public at large" i.e., the | | T1A3: Develop a research and learning program |
| Myanmar population via | | T1A4: Language training for MoHT staff |
| policy making/shaping, | | T1A5: Strengthen governance for integrated and |
| planning including | | inclusive destination planning |
| information systems | T2: Design a National | T2A1: Establish a multi-sector working group to |
| development, awareness | Tourism HRD Strategy | oversee the training needs assessment and |
| creation, visibility, | and Action Plan | strategic planning process |
| transparency and promotion | | T2A2: Prepare TOR and the HRD strategy |
| of the hospitality and | | - Research and field work |

| Component | Tasks | Activities |
|---|---|--|
| tourism sector | | - Consultative workshops |
| | | Publish and disseminate the strategy |
| | T3: Support the National | T3A1: Capacity development for NTPB and TPCB |
| | Tourism Professionals Board and Tourism | members and secretariat |
| | Professionals Certification | T3A2: Set up systems and mechanism to implement competency standards |
| | Board | competency standards |
| | T4: Develop policies, | T4A1: Draft and enact regulations for the tourism |
| | incentives and other | training/development levy (under 2013 |
| | mechanism to create an | Employment and Skills Law) |
| | enabling environment to | T4A2: Produce investment guidelines and incentives |
| | expand training provision | for new business growth and PPPs |
| | through new business | |
| | growth and PPPs | |
| Educational Programs | T5: Support the development | T5A1: Review, revise and vocationalise curricula – |
| 5: , , , , , , , , | of a stronger vocational | working with private sector stakeholders |
| Direct stakeholders and | focus for BA (Tourism) | T5A2: Support development of industry partnership |
| <i>beneficiaries:</i> Teachers, education | programs in Yangon and Mandalay | model T5A3: Upgrade training facilities, teaching and |
| professionals and students | iviariualay | learning resources (books, journals, industry |
| in the formal educational | | software) |
| sector and TVET programs | | T5A4: Capacity development through tutored |
| (embraces training of | | tourism industry immersion and educational |
| trainers, curriculum | | program for teachers |
| development, provision of | | T5A5: Sustained mentoring support for university |
| learning resources) | | teams |
| | T6: Support pre-vocational | T6A1: Review and revise curricula to ensure |
| | education for women | stronger applicability within commercial |
| | (home economics) | tourism (crafts, cookery, bakery) |
| | offered in selected schools operated by | T6A2: Upgrade teaching and learning facilities in line with tourism sector needs |
| | Ministries of Border, | T6A3: Capacity development through tutored |
| | Social Welfare and | tourism industry familiarization for teachers |
| | Education. | T6A4: Intensive tourism industry learning modules |
| | | for teachers |
| | T7: Enable wide spread | T7A1: Review standards and toolboxes for use in |
| | access to ASEAN | Myanmar |
| | occupational standards | T7A2: Create Myanmar Tourism Occupational |
| | and toolboxes for | Standards website |
| | educational and industry | T7A3: Provide web and CD access to standards and |
| | stakeholders | toolboxes for education and industry training stakeholders |
| | | T7A4: Publicize availability |
| | T8: Support leadership | T8A1: Capacity development workshop for |
| | capacity development in | principals, senior teachers, heads of |
| | the education sector to | department from schools, colleges and |
| | promote active | universities (link to parallel capacity |
| | stakeholder engagement | development for MTF and Training |
| | in HRD strategy | Department/MoHT leadership) |
| | formulation and within the | |
| | NTPB and TPCB | T004 11 119 11 15 11 11 11 11 11 11 11 11 11 11 11 |
| Private Sector Support | T9: Capacity-building and | T9A1: Identification of needs and capacities, and |
| Direct stakeholdere e | institutional strengthening | feedback to the Boards; |
| Direct stakeholders and | of key MTF Associations | Devise and implement a capacity building |
| beneficiaries: | to enable delivery of | program for each association at Bord level; |

| Component | Tasks | Activities |
|-------------------------------|--|--|
| Trainers, supervisors and | needs-led outputs | Regional exposure for Board members |
| workforce in the industry via | · | T9A2: Assessment of capacity building needs of |
| skill upgrading including | | secretariats; |
| accreditation and/or related | | Deliver capacity building for secretariats |
| recognition | T10: Support for MoHT's | T10A1: Review and assessment of curricula; |
| _ | rotational training | Observation of delivery styles and approaches |
| | program for existing hotel | Surveying the trainees (participants); |
| | staff in 4 key departments | Industry assessment of the quality of the |
| | at level 1 | training and its relevance, impact, |
| | | sustainability; |
| | | Upgrading of curricula, resource materials, |
| | | methodologies align with ASEAN competency |
| | | standards and toolboxes |
| | | T10A2: Training of trainers (TOT) – 80 in various |
| | | locations; |
| | | Evaluation of training program – trainers, |
| | | trainees, employers |
| | | Introduce travel agency and tour operator |
| | | toolboxes |
| | T11: Training program | T11A1: Needs analysis for development of |
| | for super-supervisors | supervisory level personnel in the hospitality |
| | | industry; |
| | | Design training program for supervisors |
| | | T11A2: Recruitment of selection of 180 trainee |
| | | supervisors; |
| | | Delivery of training program – and TOT for |
| | T12. Dualmana | supervisors |
| | T12: Business | T12A1: Survey current working conditions and |
| | development to improve employ conditions and | environmental management practices in tourism enterprises; |
| | environmental | Design and implement an awareness program |
| | management | for employers, coordinate with other |
| | management | development partners (such as ILO, Myanmar |
| | | Center for Responsible Business) |
| | | T12A2: Organize industry awareness workshops on |
| | | working conditions and environmental |
| | | management issues |
| | T13: Establish a tourism | T13A1: Annual budget allocation of 50,000 Euro for |
| | HRD challenge fund | three years (+10% for management costs) |
| | | into a special fund |
| | | T13A2: Develop criteria for applications – for funding |
| | | specific, higher level tourism-relate training for |
| | | industry personnel (marketing and |
| | | communication, ICT, finance, product |
| | | planning, etc.); |
| | | Establish a selection panel (ad hoc |
| | | committee); |
| | | Organize an annual call for proposals; |
| | | Short-listing and selection of candidates; |
| | | Facilitate and administer the training (mainly |
| | | in ASEAN+); Follow-up actions |
| Source: Lux-Development M | L VA 004 | ι οπονν-αρ ασποτίδ |

Source: Lux-Development MYA001

Strengthening structures for making MRA effective is expected under the first component

(Governance). Revision and reorganization of hospitality and tourism training system and their curriculum, by satisfying ACCSTP, are also expected under the second component (Education).

The third component has possibility to be resemblance to the pilot project of HRD in the Project, however the duplication does not expect due to the difference of the study areas.

(4) Germany (GIZ and Hanns Seidel Foundation)

In Bagan, German aid organized a stakeholder workshop as a part of private sector support(January-February 2013). In addition, it organized a 3-day tour guide training program aimed at fostering senior guides (April 2013).

In Magway Region, the other side of Bagan along the Ayeyawady River, through German aid, weaving training has been organized, since the area is active in cotton weaving.

However, the target area of German aid for private sector support is moving to Shan State. In Shan State, GIZ established a project office in Taunggyi and conducts various training for "tour conductors" (village guides that do not require a tour guide license) and community-based tourism.

As Hanns Seidel Foundation (HSF) supports Responsible Tourism and Community Involvement in Tourism, stakeholder workshops involving more than 1,000 stakeholders was organized in different places including Bagan between 2012 and 2013. The above-mentioned workshop in Bagan was part of this. HSF has also contributed to establishing "Do's and Don'ts" (March 2013), as part of formulating a tour guide training curriculum (April 2013), training for tourist police (August 2013), encouraging conversation with Thai counterparts (November 2013), etc.

HSF also coordinates and supports the tourism sector working group in Myanmar.

(5) Swiss (SDC)

SDC has signed an MOU with the Ministry of Labor for a Vocational Skills Development Program (VSDP). A consortium of Swiss Contact (Swiss) and INBAS (German) was selected to carry out implementation. INBAS has accumulated experience in Dual System²⁷ based on the German apprentice system.

VSDP started in February 2014. Its inception phase is to last for 7 months until August 2014, followed by an implementation phase lasting 3 years until December 2017. VSDP expects 4 years in total.

VSDP comprises three components: 1) Hospitality Training Initiative (HTI), 2) Mobile Training Unit (MTI), and 3) National Skill Standard Authority (NSSA).

5 courses are foreseen under HTI, including furniture, metal work, hospitality, gastronomy, etc.

²⁷ Combination of lecture and experiment in the training course.

Each training course will be based on a 3-year curriculum, different from the other current training programs composed of short programs including ACCSTP toolboxes.

Besides this, HTI plans to conduct TOT for middle management training targeting 3-star and 4star hotels (excluding 5-star hotels). The target area will be Yangon, Nay Pyi Taw, Mon State and Kayin State.

(6) Netherlands

The Government of Netherlands is currently preparing CBT for the Kaya State.

(7) ICIMOD (International Centre for Integrated Mountain Development)

ICIMOD based in Kathmandu in Nepal supports regional development in Hindu Kush Himarayan Region including Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, Pakistan-Kathmandu and takes role of learning and information center among the region. ICIMOD expressed intention to support tourism development around Inle Lake. The support may include formulation of a management plan²⁸.

(8) WCS (Wildlife Conservation Society)

WCS is one of international NGOs established in 1895 which aims to conserve wildlife and wild places all over the world. WCS has been working in Myanmar since 1993, mainly supporting conservation of nature and eco-tourism including forest conservation in northern Myanmar, freshwater dolphins in the Ayeyawady River, etc.

(9) FFI (Flora and Fauna International)

FFI has experienced more than 140 projects related to conserve diversification of fauna and flora over 40 counties and more. FFI together with Ministry of Environment and Conservation of Forests (MOECF) as a counterpart agency have been supporting a community-based tourism project focusing on eco-tourism at Indawgyi Lake, Kachin State since 2011.

(10) Singapore

International Hotels and Tourism School in Singapore (SHTEC), established by the Singaporean Hotel Association, has plans to establish a hotel school in Yangon.

(11) Thailand

A Thai national hotel chain, Dusit Hotels, has intentions to build a hotel with a training school in Yangon.

2.5.2 Cultural Heritage Sector

(1) United Nations Educational, Scientific and Cultural Organization (UNESCO)

Regarding the monuments conservation, the assistance of updating the existing inventory drawn by UNESCO as the main component has been carried out by Japan Fund-In Trust with

²⁸ Norwegian government supports to environmental conservation study at the Inle Lake, which succeeds to this ICIMOD project.

the aim of improving the conservation of monuments through international conservation measures. At the same time, developing of survey techniques, data collection methods, assay method and conservation guidelines on the current state of monuments. In addition the project aimed at capacity development related to conservation techniques has been scheduled.

UNESCO implements formulation of GIS maps, preservation of the mural paintings, review of display in the Bagan Archaeological Museum and support for preparation of registration forms and documents as part of capacity development. Also in Pyu, it supports implementation of the management plans.

UNESCO also implements enhancement of restoration work and monitoring through human resource development for the Department of Archaeology. Besides these, the development of support of Integrated Management System (IMS) has been carried out.

(2) Japan

The National Research Institute for Cultural Properties, Tokyo has implemented the three areas within the international cooperation project concerning the protection of cultural heritage, that are [1] monuments, [2] arts and crafts including the mural paintings and [3] archaeology (recommitment to the National Research Institute for Cultural Properties, Nara) since 2013. Their counterpart is the Department of Archaeology in Myanmar. Its capital source are the grants from the projects of Networking Core Centers for International Cooperation in the Conservation of Cultural Heritage entrusted by the Agency for Cultural Affairs in Japan and operating expense of *Tobunken*.

1) Monuments

- Site: the Department of Archaeology Mandalay Branch, Inwa Bagaya Monastery (five on-site trainings and two inviting trainings planned)
- Target: mainly from young to mid-level staff from the Department of Archaeology
- Duration: from 2013 to 2015
- Contents: toward appropriate conservation of the monastery mentioned above, implementation of the basic survey, recording, developing conservation, management and restoration plan.

2) Arts and Crafts

- Site: the Department of Archaeology Bagan Branch, Pagoda No.1205 (five on-site trainings and three invitation trainings planned)
- Target: mainly young staff from the Department of Archaeology
- Duration : from 2013 to 2015
- Contents: The candidate are the mural paintings in the pagoda mentioned above, detailed photography, the analysis of the material used in the mural painting and repair also serving as training for the target mentioned above. Moreover measuring of temperature and humidity in the pagoda and weather observation in the court of the Department office are implemented. Through these contents, studies on repair material to use and ways of cleaning control of peeling and reinforcing treatment.

With regard to lacquer art, the current situation survey of material, technique, damaged condition and others of traditional lacquer art have been implemented. The counterpart is

the Ministry of Cooperatives, Small-Scale Industries Department.

3) Archaeology

- Site: Pyay Field School of Archaeology (three on-site trainings and three invitation trainings)
- Target: mainly young staffs from the Department of Archaeology
- Duration: from 2013 to 2015
- Contents: regarding the conservation and application of the walled cities, training in basic techniques (measurement, excavation, actual survey, photography, preservation treatment and others) are implemented.

2.5.3 Possible Demarcation of Roles with JICA Project

Based on the current situation of support programs by other development partners, possible demarcation of roles with JICA Project is summarized in the following table.

Table 2.28 Possible Demarcation of Roles with Other Development Partners

| | Partners | Possible Cooperation or Complementary Actions |
|----------|---------------|---|
| Tourism | ASEAN | Consistent tourism marketing in line with ATMS |
| | | Application of ACCSTP, CATC and MRA Toolboxes |
| | | Application of ASEAN Tourism Standard including Green Hotels, CBT, etc. |
| | | for tourism development in Bagan |
| | ADB | Cooperation with GMS Tourism Project (MTF, GMS working group meetings, |
| | | etc.) |
| | | Realization of tourism development in line with Myanmar Tourism M/P |
| | Luxemburg | Collaboration with HRD Project |
| | | ➤ 1) Consistency of strategy with Governance Component |
| | | ➤ 2) Synchronized hospitality training with Education Component |
| | | ➤ 3) Consistent hospitality training with Private Sector Support Component |
| | Germany | Sharing information with Marketing Expert attached to MTF |
| | (GIZ and HSF) | Utilization of experience of weaving training in Magway Region |
| | | Utilization of curricula and outcome of tour guide training in Bagan |
| | | Sharing information of HSF's regional tourism development in Shan State |
| | Swiss | Sharing information with VSDP in Yangon, Nay Pyi Taw, Mon State and Kayin State |
| | Netherland | Consistency in approach of CBT in Kaya State |
| | ICIMOD | Sharing information of tourism management plan in Inle Lake |
| | WCS | Sharing information on eco-tourism including Irrawaddy dauphines |
| Cultural | UNESCO | Avoiding negative development for World Heritage registration |
| Heritage | | Obtaining information on GIS, preservation of fresco, museum exhibition |
| | | improvement, etc. for seeking synergy effect |
| | Japan | Sharing information with the organizations providing cooperation in Myanmar and Bagan |

Source: JICA Survey Team based on the information obtained from each partner

CHAPTER 3 THE PERSPECTIVES ON FUTURE INTERNATIONAL TOURISTS AND SOCIO-ECONOMY OF MYANMAR

In this chapter, future perspectives regarding international tourists, and population and economy of Myanmar are reviewed to clarify overall socio-economic circumstance of future tourism in Bagan.

3.1 Past Trend and Perspectives on the International Tourists

Perception of international tourists is one of the important backgrounds to consider future tourism development in Myanmar. This chapter focuses on reviewing perspectives and the past trends of the international tourists based on the "Tourism Highlights 2014" published by UNWTO.

3.1.1 Past Trend of International Tourists

(1) International Tourist Arrivals

Tourism has experienced continued expansion. According to the UNWTO¹, the international tourists, tourism investment and tourism receipts increased over the past 6 decades. Figure 3.1 shows the past trend of the international tourist arrivals since 1990. The figure clearly shows that the international tourists tend to continuously increase, particularly tourist arrivals from Europe occupies more than half of total international tourist arrivals and with a relatively higher increased rate. Meanwhile, Asia and the Pacific Region have a higher increase rate of international tourist arrivals, and come second with the largest arrivals after 2005 in the regions after Europe.

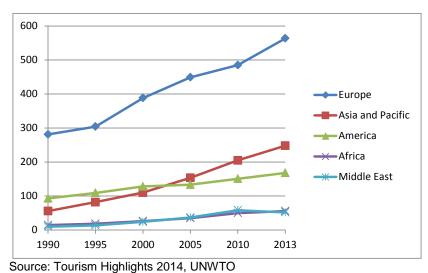


Figure 3.1 International Tourists Arrivals

(2) Outbound International Tourists

Outbound international tourists are viewed in Figure 3.2. Similar to the international tourist

Page 2 of "Tourism Highlights" 2014 Edition.

arrivals, Europe has the largest outbound international tourists which accounts for more than half and with a relatively higher increased rate too. European tourists are more than half of total international tourists. On the other hand, Asia and the Pacific Region also have a higher increased rate of outbound international tourists and come second after Europe.

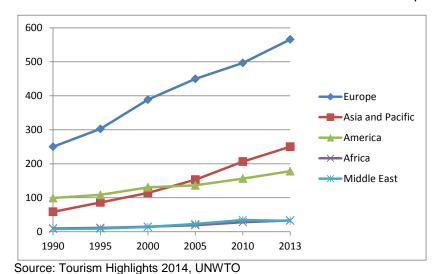


Figure 3.2 Outbound International Tourists

3.1.2 Perspectives

Likewise, the International tourists are on an increasing trend over the long term and this is expected to continue in the future too. For example, the UNWTO projects 1.8% increase in the international tourist arrivals. It can estimate 1.8 billion international tourist arrivals in 2030. Looking into the international tourist arrivals by the regions, Europe will still maintain its position as having the majority of the international tourist arrivals, however, Asia and the Pacific will increase their international tourist arrivals to 535 million tourists. It will depend on the expansion of tourism market due to economic growth of Asian countries.

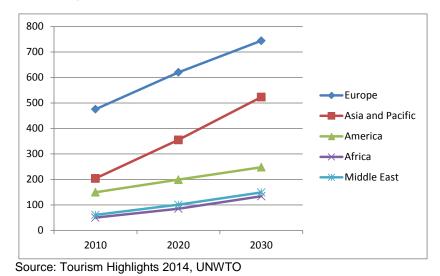


Figure 3.3 Perspectives of International Tourists

3.2 Perspectives on the Future Socio-Economic Growth in Myanmar

Stability and growth of the socio-economy are an important precondition of tourism development. Stability and growth especially of the economy are indispensable to increase of investment, employment and foreign currency inflows. This section mainly focuses on reviewing future socio-economic perspectives based on the discussions made in "The Survey Program for The National Transport Development Plan In The Republic of The Union of Myanmar (hereinafter referred to as "JICA National Transport M/P)" conducted by the JICA.

3.2.1 Future Population

According to the JICA National Transport M/P, future population is projected with the Cohort method² based on birth and death rates between 5 years age group and Child to Woman Ratio (CWR) in the same age group. The JICA National Transport M/P set-ups high/middle/low cases with different assumptions on birth-death rates and CWRs. Among the three categories, The JICA National Transport M/P evaluates the results of each case from realistic points of view then finally selects the middle category as the most likely category which is estimated at 63 million persons in 2015, 67 million persons in 2020 as the future total population of Myanmar, as shown in Table 3.1. In the same period, Mandalay Region may have 590 thousands persons in 2015 and 600 thousand persons in 2020.

Table 3.1 Future Population in Myanmar and Mandalay Region

| | 2015 | 2020 | 2030 | 2040 |
|---|--------|--------|--------|--------|
| Population in Myanmar (thousands persons) | 63,554 | 66,914 | 71,898 | 73,818 |
| Increase Rate (%) | 1.5 | 1.0 | 0.7 | 0.3 |
| Population in Mandalay Region | 5,914 | 6,013 | 6,113 | 6,151 |

Source: JICA National Transport M/P, 2014

3.2.2 Future GDP

It seems difficult to foresee the future economic development pace and magnitude in Myanmar because it is just a very short period that has passed since political and economic liberalization. Accordingly, the JICA National Transport M/P adopted a cross-sectional analysis which compares economic growth patterns of several eastern and southeastern countries such as Japan, Thailand, Malaysia, Indonesia and Vietnam. Based on this analysis, the JICA National Transport M/P assumes 7% of annual GDP growth rate between 2011 and 2035. This eventually results into national GDP assumed at 56 billion MMK in 2015 and 160 billion MMK in 2020 as shown in Table 3.2. In the same period Mandalay Region is assumed to have 6 billion MMK of the Gross Regional Domestic Products (GRDP) in 2015 and 9 billion MMK of the GRDP in 2020.

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² The method to estimate population by 5 years-range-group with certain parameters such as survival ratio and immigration ratio by sex, birth rate by mother's age group, birth rate by sex etc. which are obtained from analysis of population data by 5 years-range-group.

Estimation of Future GDP in Myanmar Table 3.2

| | 2012 | 2015 | 2020 | 2030 |
|---------------------------------------|--------|--------|--------|---------|
| GDP in Whole Country (Billion MMK) | 46,915 | 56,565 | 80,081 | 160,497 |
| GRDP of Mandalay Region (Billion MMK) | 5,186 | 6,245 | 9,302 | 21,364 |

Note: 2010 price Source: JICA National Transport M/P, 2014

CHAPTER 4 BAGAN TOURISM DEVELOPMENT POLICY

In this chapter, the strategic direction of Bagan tourism development to achieve future vision and targets are proposed along the Myanmar Tourism M/P. Necessary actions to be taken to materialize the strategic direction are also proposed. The proposals in this chapter are compiled based on the results of surveys and discussions with stakeholders in Myanmar in the course of this stage of the project. They shall be subject to be finalized in the next stage of the project.

4.1 Objectives of Tourism Development in Bagan

4.1.1 Position of Bagan in National Tourism M/P

Myanmar Government accepts and opens to the public the Myanmar Tourism M/P, which is developed along the basic concept of the MRTP that was developed in 2012. The Myanmar Tourism M/P shows the tourism development policy and priority projects and plays a principle role of tourism development planning in Myanmar.

The Myanmar Tourism M/P identifies the; (1) maximization of benefits of tourism development on employment and income of the people in Myanmar and (2) equitable distribution of benefits from tourism development to the entire Myanmar as the goal of tourism development and sets forth the following nine (9) guiding principles to achieve that goal:

- Develop tourism as a national priority sector.
- Promote broad-based local, social and economic development.
- Maintain cultural diversity and authenticity.
- Conserve and enhance Myanmar's protected areas and the natural environment.
- Compete on product richness, diversity and quality.
- Ensure the health, safety and security of visitors.
- Strengthen institutional capacity to manage tourism.
- Develop a well-trained and rewarded workforce.
- Minimize unethical practices.

Along with these guiding principles, it is necessary to develop and diversify new tourism products, improve tourism services to make Myanmar a whole year round tourism destination. For this purpose, the Myanmar Tourism M/P proposes to pay more attention on adventure tourism, community-based tourism, volunteer tourism, cruise tourism, pilgrimage and MICE (meeting, incentive tour, conference and exhibition) tourism.

The Myanmar Tourism M/P puts more emphasis on; (1) natural based tourism, (2) Adventure and experience tourism, (3) cruise tourism, which are to be promoted at Bagan. Although it is not clear what "Natural-based tourism" implies in Bagan, "adventure and experience tourism" implies the balloon and cycling both in Bagan, and "cruise tourism" implies the river-cruises along Irrawaddy River.

Bagan, where 60% of the foreign tourists arrive at, is the main event of tourism and is most advanced tourism destination in Myanmar. Bagan is expected not only own tourism development but also leading whole tourism in Myanmar. In conclusion, Bagan is required to play the following roles in the Myanmar Tourism M/P:

- To continuously lead tourism and expand pie of tourism in Myanmar
- To diversify its tourism products, that is to say adventure and experience tourism as well as cruise tourism
- To be a model of tourism destination showing sustainable and balanced development among environment, cultural heritage and economic benefits to local residents,

4.1.2 Vision of Bagan as Tourism Destination

Bagan is well-known as one of "three major Buddhist heritages" in the world. Buddhist heritage in Bagan is the most significantly valued cultural asset of Myanmar which is being planned for as a world heritage and is also no doubt in position as a significant tourism product in Myanmar. The Buddhist heritage of Bagan will continuously be the main sales-point of Myanmar tourism.

The major difference from other "three major Buddhist heritages" such as Angkor Wat and Borobudur is its landscape with widely scattered 3,122 temples and towers beyond the horizon. In addition most of the temples and towers in Bagan are used as Buddhist religious places which are still places of Buddhist festivals and praying. This magnificent landscape and living Buddhism are the indigenous and advantage of Bagan, so these unique characteristics should be more highlighted to create branding of the Bagan.





Moreover, Bagan tourism should largely contribute to maximize employment and income generation of the people in Bagan as the leading tourism destination in Myanmar. In this regard, Bagan should not totally relay on existing Buddhist heritages but try to diversify tourism products as well as encourage involvement of local people in the tourism business in Bagan. And. Bagan should be a unique tourism destination with a system to sustain between tourism development, and environment and cultural heritages conservation.

The future vision of Bagan as tourism destination is proposed based on the considerations above, as shown below:

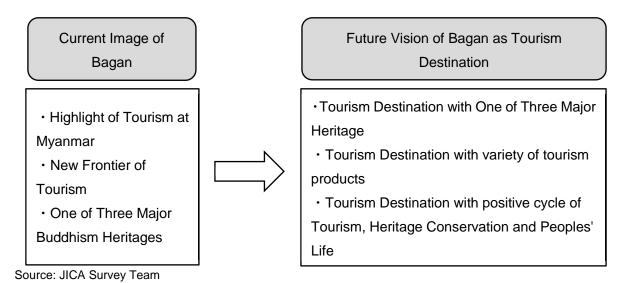


Figure 4.1 Vision of Bagan as Tourism Destination

4.2 Tourism Growth Target and Target Segment

4.2.1 Analysis of Current Situation

(1) Review of Foreign Tourists

In reflection to the increase of tourists in the world, foreign tourists in Bagan have continuously increased in recent years. The number of foreign tourists reached approximately 196,000 tourists in 2013. In Bagan, approximately 60,000 tourists increased in number after democratization in 2010 to 2011 and the foreign tourists constantly increases by 15,000 to 30,000 tourists in the following years, whose average increase is approximately 25,000 tourists a year.

Next, high season of Bagan's tourism is during October and March. Bagan gets approximately 76.4% of the foreign tourists. In particular the highest month is November, which records approximately 15.8% (in 3 years average from 2011 to 2013) of the total foreign tourists.

Meanwhile, the Average Length of Stay (ASL) of Bagan tourism is 2.0 days according to an interview survey. This was based on the majority of package tourists and the total number of foreign tourists. ASL of Free Individual Tourist (FIT) and backpackers is relatively longer than that of the package tourist, which account for 2.5 and 3.0 days respectively, according to the interview too.

(2) Estimate of the Composition of Tourist Types

1) Procedure of Estimate

In order to achieve future tourism development in Bagan, setting up target groups of tourists is one of the important factors. Tourists could roughly be divided into three groups that are Package Tourists, FITs and Backpackers and they have different ASL, activities and tourist's

consumptions. Accordingly, it is very important to figure out the proportion of each of these three types. However, there is no data available in Bagan. Thus, the composition of tourist types in Bagan is estimated along with the procedure illustrated in Figure 4.2

For the estimates of the composition of tourist types, foreign tourists in Myanmar and Bagan are available in the Tourism Statistics 2013 published by MoHT however, the other factors are not available from any past plans and surveys so certain factors are assumed based on the results of interview surveys and investigation.

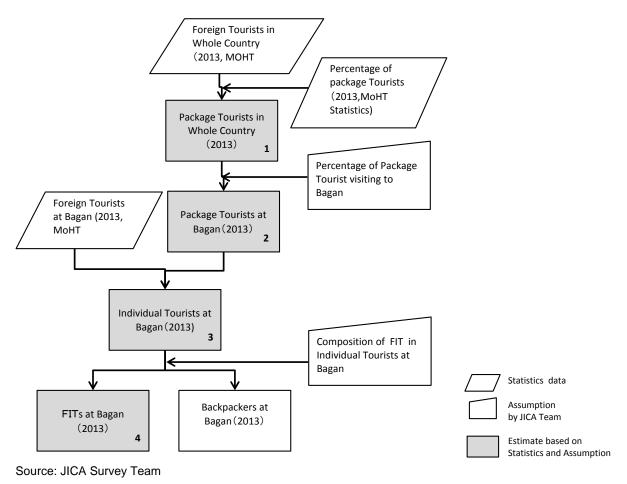


Figure 4.2 Estimate of Composition of Tourist Types in Bagan

2) Results

Number of package tourists in the whole nation (1 in Figure 4.2)

According to the Myanmar Tourist Statistics 2013, 17 % of the foreign tourists at Yangon entry point were package tourists. Since the border tourists and tourists arriving at Nai Pyi Taw are a completely different type of tourist, it is assumed that package tourists enter Myanmar through Yangon and Mandalay International Airport. Basing on that assumption the total number of tourists at Yangon and Mandalay entry points in 2013 was 887,000 tourists, therefore the package tourists are assumed to be151,000 tourists.

Package Tourists in Bagan (2 in Figure 4.2)

Package Tourists in Bagan are estimated basing on the total number of package tourists in the whole nation. According to the interview survey as well as analysis of itinerary provided by package tours, approximately 70% of the package tours visit Bagan. Therefore Package tourists in Bagan are assumed to be107,000 tourists.

Individual Tourists in Bagan (3 in Figure 4.2)

Individual tourists were 84,000 based on 196,000 of the foreign tourists in total and 112,000 of the package tourists.

FIT Tourists in Bagan (4 in Figure 4.2)

Individual tourists can be conceptually divided into two types: FITs of upper class and backpackers of the lower class. According to the interview survey on hotels in Bagan, the composition of FITs and backpackers is supposed to be 50:50, thus FITs and backpackers in Bagan are assumed to be 42,000 tourists each.

4.2.2 Considerations of Constraints on Future Increase of Tourists based on the Analysis of Current Conditions regarding Tourism

In this section, the matters concerning constraints on future increase of tourists in Bagan are discussed, which include; air access, hotel rooms and congestion at certain Buddhist temples.

(1) Air Access

Capacity of air transport to/from Bagan increases year by year. It lies within the open sky policy that was introduced in 2011 by the Myanmar government. Private companies flexibly provide air services in accordance with demand. Looking into the airport facilities, Nyaung-U Airport has 2,600m of runway excluding a taxiway, a lighting system and air control system. Due to visual navigation in day-time, flight delays or flight cancellations sometimes occur. It may sometimes affect tour itinerary but is a small constraint on transport capacity.

Accordingly, it is concluded that domestic air access is not yet crucial to increase tourists at Bagan.

(2) Hotel

Occupancy rate is over 80% during the high season. Hotel room capacity may be constrained in the near future, if the hotel rooms do not increase in proportion to increase in the number of tourists.

Looking into the past records the number of hotel rooms has increased by 400 rooms in past 3 years, from 2011 to 2013, in which the number of tourists drastically increased. Bagan has four (4) hotel zones which is approximately 250ha in total and seems to be enough, so the hotel room capacity may not be a serious constraint on increase of tourists from the available space point of view.

(3) Basic Infrastructure

Hotels in Bagan in general use electricity, telecommunication and waste disposal of public services in Nyaung-U district. Water supply is provided through the owner's deep well and sewerage is treated with the owner's septic tank. There is no drainage system in Bagan too.

As public service, electricity and telecommunication are still not sufficient with blackouts and low speed of communication in Bagan. Hotels normally use their own electric generator during blackouts, but is fewer times compared to the other parts of Myanmar. Telecommunication is gradually improving with optic fiber network expansion. Waste disposal service is provided at a standard level as other townships in Myanmar. Final disposal sites, applying open dumping, have sufficient capacity. Water quality of deep wells is not so favorable but there is no report regarding water deterioration or decrease in number of deep wells. Accordingly, basic infrastructure seems not be a constraint on tourism development in short/mid-term period.

(4) Congestion at Certain Tourism Buddhist Temples

In high season, many tourists concentrate on certain temples at sun-rise and sun-set time. There is an unfavorable reputation that this sort of concentration of tourists affects tourist satisfaction, resulting into a deteriorating image of Bagan tourism. It is easily foreseen that more tourists will concentrate on certain temples. This may not be directly constraint of tourists but may have a risk to deteriorate attractiveness of Bagan in mid/long term periods.

4.3 SWOT Analysis of Bagan Tourism

Here, the SWOT analysis is carried out to identify what we can use and what we should overcome to achieve the tourism vision described in section 3.1, based on the current characteristics of foreign tourists (section 3.2.1) and the issues regarded as constraints in future (section 3.2.2).

4.3.1 Strengthening (S)

Myanmar has had limited free entrance and free travel in the country for long time, accordingly Myanmar itself is still a new tourism destination with a feeling of a frontier. Therefore, Myanmar's strengthening of Bagan as a tourism destination is its unique and magnificent landscape of Buddhist heritage. The magnificent landscape with uncountable number of Buddhist temples and towers scattered beyond the horizon on sun-rise and sun-set is counted as one of "Three major heritages" in the world. River-cruise along River Irrawaddy is also one of the attractive tourist products in Bagan. Safe environment and hospitality of local people helps to leave a good memory of Bagan too.

In brief the factors include;

- · Buddhism heritage with living Buddhism culture and folkway.
- Sun-rise and sun-set.
- River Irrawaddy.
- Good safe environment.
- Hospitality of local people.

- Accumulation and experience as tourism destination.
- New tourism destination with a feeling of a new frontier.

4.3.2 Weakness (W)

Bagan also has weaknesses as a tourism destination. One weakness is its location. Bagan is inconveniencing in terms of accessibility by both land and air transport. It is obviously an obstacle to attracting tourists. Bagan is also located in the semi-arid zone, making Bagan hot and dusty year round, which hampers comfortable travel in Bagan. Second is seasonal fluctuation of foreign tourists. In high season, many tourists are congested at certain Buddhist temples at certain times and hotel rooms are sometimes running short against demand on the other hand. Tourism business relies exclusively on high season. It generates higher hotel charges, resulting in lower "Value for Money (VFM)". Tourism infrastructure like tourist information center (TIC), guide boards, light and walking paths etc. are not well provided, so the service level for individual tourists is still lower in Bagan. Lastly it can be pointed out that there is no attractive site or street where the foreign tourists may enjoy walking neither in Nyaung-U Town nor New Bagan Town. Accordingly, there are no varieties of attractiveness or fun for the foreign tourists.

In brief the factors include;

- Poor transport accessibility
- Inconvenience for individual tourists to go around tourism products in Bagan
- Higher temperature with dust in dry season
- Concentration of tourists and hotel room shortage in high season
- No attractive site or street where the foreign tourists enjoy walking
- Crowded at certain temples at sun-rise and sun-set times
- Large fluctuation of tourism between high and low seasons
- Low VFM

4.3.3 Opportunity (O)

As a positive factor in external circumstances of Bagan Tourism, the progress of free travel in the nation and tourism free investment in Myanmar has had positive impacts or opportunity for tourism in Bagan which is expected under continuous economic growth, liberalization and democratization in Myanmar. Economic development of neighboring countries like India, Thailand and China generates more potential tourists. In particular, Southeast Asian countries like Thailand have many Buddhists, so their potential demand on Buddhism heritage tourism might be large. Bagan also has a potential to exploit new tourism products using various resources in nearby areas. To summarize the factors;

- Economic growth, liberalization and democratization of Myanmar.
- Expansion of tourism market by neighboring countries like India, Thailand and China.
- Unused (or low used) potential tourism resources.

4.3.4 Threat (T)

Negative factors external to Bagan Tourism is pointed out as high competition among Buddhist

heritages in the Southeast Asia. Bagan has strong competitors such as Sukhothai and Ayutthaya in Thailand (both are world heritage), Angkor Wat and Preah Vihear in Cambodia (both are world heritage), Luang Prabang and Wat Po (world heritage) in Lao PDR, and Borobudur (world heritage) in Indonesia, so the quality and strategy of promotional activities is an important key factor. Failure of heritage conservation as well as a wrong strategy to develop new tourism product will harm the value of Bagan as a tourism destination. Accordingly, the proper function of the organization structure on destination management and promotion would be the key to success. Bagan is located in the vulnerable environment of a semi-dry zone with very limited water available. Change of environment may have significant impacts on the vulnerable environment like one more drier and water shortage of Irrawaddy River which may harm the basis of living environment and tourism. In the long term, it is necessary to pay attention to change of global environmental issue and its effects. In conclusion the following are the key points:

- High competition with other Buddhism heritage tourism destinations
- Deterioration of heritage and failure of development strategy
- Less function of organization on tourism development and promotion in Bagan
- · Insufficient tourism investment
- Lowering of the local people's supports to Tourism due to limited benefits from tourism.

Results of the SWOT analysis described above are summarized in Table 4.1.

Table 4.1 Summary of SWOT Analysis

| Positive Factor | Negative Factor | |
|---|---|--|
| <u>Strength</u> | <u>Weakness</u> | |
| Buddhism heritage with living Buddhism culture and folkway Sun-rise and sun-set River Irrawaddy Good safe environment Hospitality of local people Accumulation and experience as tourism destination New tourism destination with a feeling of frontier | Poor transport accessibility Inconvenience for individual tourists to garound tourism products in Bagan Higher temperature with dust in dry season Concentration of tourists and hotel roor shortage in high season No attractive site or street where the foreig tourists enjoy walking | |
| | • Low VFM | |
| Opportunity Economic growth, liberalization and democratization of Myanmar Expansion of tourism market by neighboring countries like India, Thailand and China Unused (or low used) potential tourism resources | Threat High competition with other Buddhism heritage tourism destinations Deterioration of heritage and failure of development strategy Less function of organization on tourism development and promotion in Bagan Insufficient tourism investment Lowering of the local people's supports to Tourism due to limited benefits from tourism. | |

4.4 Basic Approaches on Bagan Tourism Development

4.4.1 Basic Approaches

Bagan is required to lead tourism in Myanmar as the main attraction of Myanmar tourism. Bagan is also required to diversify tourism products to adventure tourism, cruising tourism and others based on the Buddhism heritage which aims to attract more tourists and to get more tourism income and local employment. To achieve this, the "Strengths" and" Opportunities" should be fully utilized to demine/improve "Weakness" and to be ready to tackle the "Threat". In this sense, the following implications can be taken into account for further delineation of basic approaches of tourism development in Bagan:

- Large seasonal fluctuation of tourists generate several weakness of tourism in Bagan as
 well as risky business environment for hotels, high hotel rates, lower VFM, crowded
 Buddhist temples and towers. Accordingly, necessary action to mitigate the seasonal
 fluctuation of tourists by promoting off season tourism in Thailand, India and China and
 so on which have a relatively bigger increase of outbound tourists.
- Weakness of hot temperatures, dusty and no sufficient walking routes should be solved as much as possible to improve satisfaction and conformability of tourism at Bagan, which also contributes to the improvement of VFM as well.
- New branding of Bagan shall be done to prepare for the future threat of heavier competition against the Buddhism heritages in the Southeast Asian countries.
- It is necessary to expand business chances of local people by extending length of stays, by exploiting new tourism products to overcome weaknesses of limited involvement of local people in tourism businesses in Bagan.
- Threats of low functioning tourism promotion and development bodies should be removed for continuous growth of tourism in Bagan.

The following basic approaches are taken into account based on the above implications of the SWOT analysis.

- Develop an enabling mechanism for enhancing the FITs' (Free Individual Tourist) tourism experiences in Bagan
- · Improve VFM
- Enhance long-life of tourism resources

4.4.2 Tourism Growth Target

The basic approaches of Bagan tourism development mentioned above could be interpreted as numerical targets as shown in Table 4.2.

Table 4.2 Numerical Target of Bagan Tourism Development

| Year | | 2013 | | 2015 | | 2020 | |
|--|--------------------------------------|---|-------|--|-------|---------------------------------------|--------------------|
| Foreign | | 196,000 | | 266,000 | | 466,000 | |
| Visitors | Natural Growth Portion | | | 50,0 | 00 | 125,000 | |
| | Promotion Portion | | | 20,0 | 00 | 75,0 | 000 |
| | | | | | | | |
| Style | G | 107,000 | 54.6% | 134,000 | 50.4% | 202,000 | 43.3% |
| | F | 44,500 | 22.7% | 76,000 | 28.6% | 180,000 | 38.6% |
| | В | 44,500 | 22.7% | 56,000 | 21.1% | 84,000 | 18.0% |
| G: Group Tours (10-20 PAX) F: FIT (1-4 PAX) B: Backpackers (1-2 PAX) | | B G | | B G | | B G F | |
| Average L ALS (nigh | ength of Stay (ALS) ts) | 2.0 |) | 2.4 | | 2.7 | |
| | ge of Concentration s in November | 15.6% | | 15.0% | | 12.0% | |
| Hotel Room Rooms Occupancy rate (annual) | | 2,400 38.1% | | 2,800 51.5% | | 4,500 62.8% | |
| Balance of Rooms and Visitors in Hotel Room Required Hotel Room Available Balance Occupancy Rate (in Nov.) | | High Season (Nov.) 52,000 rooms 72,000 rooms 20,000 rooms 72.2% | | 79,000 r 84,000 r 5,000 r 94.0% | ooms | 123,840 135,000 11,160 91.7% | rooms |
| Tourism Ir | ncome (million USD) | 14 | | 43 | | 101 | |
| | Employment ent in hotels | 5,600 persons 3,500 persons | | 6,000 persons 4,000 persons | | | persons persons |

Source: JICA Study Team

(1) Target of Foreign Tourists

Foreign tourists at Bagan recently increased to 25,000 tourists annually. Looking at the development potential of Bagan as the world-class tourism destination, it is easily foreseen that the foreign tourists would naturally increase with a similar increased pace in short- and midterms. In addition to this increase of foreign tourists, Bagan should try to increase the individual tourists especially FIT by carrying out promotional activities as mentioned in the basic approaches, which is expected to generate more local employment and business chances. Accordingly, the foreign tourists target is 266,000 persons by 2020 and 466,000 persons by 2025.

(2) Target of Composition of Foreign Tourists

First of all, it is foreseen that package tourists will naturally increase following the past trend. In fact, about 20% of the foreign tourists increase in 2015 comparing to that of 2013, according to the MoHT Bagan Office¹. It is necessary to extend length of stays and expenditure of tourists, in order to increase tourism income in Bagan. For this purpose, Bagan should focus on the FIT rather than package tourists because the package tourists normally have more limits on tour itinerary with shorter stays. The promotional activities should target the FIT to be raise by 26.7% by 2015 against total number of tourists, 37.1% in 2020 from 22% in 2013, and tourists in the off-season.

Assuming that the ALS of package tourists, FIT and Backpackers are 2.0 days, 2.5 days and 3 days respectively. The ALS of Bagan, which is 2.0 days in 2013 would be 2.3 days in 2015 and 2.7 days in 2020.

(3) Target of Mitigation of Seasonal Fluctuation

Seasonal fluctuation of visiting tourists at Bagan harms stability on tourism businesses such as hotels, restaurants and tour guides. Accordingly, foreign tourists at the off-season should be encouraged with the promotional activities. It is also effective to mitigate shortage of hotel rooms as well as regulate business risk of hotel which may contribute to lower hotel fares since hotels usually set high rates to earn money as much as possible at the high season. This may greatly lead to rise of VFM too. Accordingly, Bagan should encourage reduction in the seasonal fluctuation to 15 % of peak month rate by 2015, and 12% in 2014 from 15.6 % in 2013 through the tourism promotion for the off-season, for example promotion of MICE.

(4) Target of Hotel Rooms

Mitigation of the seasonal fluctuation of foreign tourists at Bagan can restrain demand of new hotel rooms. However, lower occupancy rate of the hotels generates more management risks on hotels, so the occupancy rate of the hotels should be controlled to keep it at a certain level of the occupancy rate. Considering the current natural increase of hotel rooms which accounts for 400 rooms increase in the past 3 years, the number of hotel rooms target is 2,800 rooms by 2015 and 4,500 rooms by 2020 against 2,400 rooms in 2013.

It may be necessary to promote other 1,000 rooms during the period from 2013 to 2020, assuming the current pace of hotel rooms is expected to continue at the projected rate it would account for 700 rooms during the same period by means of some measurements such as incentives for tourism investment and simplification of the existing procedure for development permissions.

(5) Tourism Income and Employment

With the increase of the foreign tourists, increase of FIT and their stays, tourism income of Bagan will increase to 42 million USD in 2015 and 99 million USD in 2020 from 14 million USD in 2013. Similarly, tourism employment of Bagan will increase to 10,300-11,300 in 2020

¹ Results of interview to the MoHT Bagan Office

from 5,150 - 5,600 in 2013 (refer to Figure 7.2 in Chapter 7).

4.4.3 Necessary Actions to realize Basic Approaches and Targets

(1) Action

The future Vision of Bagan as a tourism destination is under the following phrases, "Tourism Destination with Three Major Heritage Tourism", "Tourism Destination with variety of Tourism Products" and "Tourism Destination with a Positive Cycle among Tourism, Conservation and People's Life". This vision aims at attracting more foreign tourists by differentiating Bagan from other heritage tourism destinations by unique branding, expanding more local benefits by providing more various tourism products and continuing attractiveness as a good tourism destination. To materialize this vision, it is indispensable for Bagan to extend average length of stay of the foreign tourists, improve satisfaction of the foreign tourists and enhance long-life of tourism resources.

The following five (5) actions should be taken into account to realize the basic approaches and targets mentioned above:

Action 1: Tourism Promotion for increasing FITs and Tourists during the Off-season

Action 2: Improvement of Local Accessibility to Approach Tourism Products

Action 3: Improvement of Value and Satisfaction of Tourism Products

Action 4: Improvement of Business Environment to Encourage Local People's Involvement in Tourism

Action 5: Enhancement of Sustainability as a Tourism Destination

Relation among vision, basic approach and actions are illustrated in Figure 4.3.

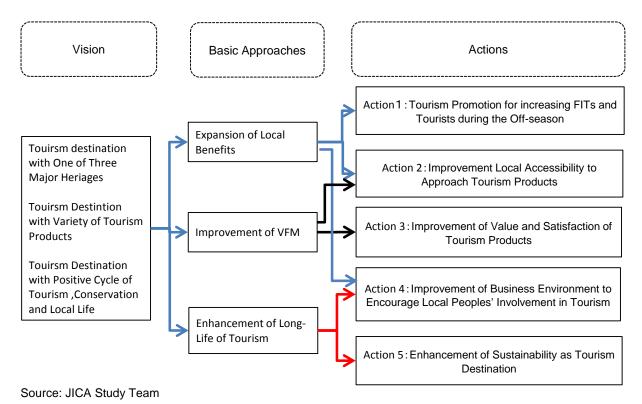


Figure 4.3 Vision, Basic Approach and Actions of Proposed Tourism Development in Bagan

(2) Relation among Actions

An Action will show its effects in relation with other actions. To show up the relations, we should be reminded that Bagan Tourism requires provision of more local benefits, improvement of VFM, and to continue carrying them out. For this reason, it is indispensable to increase foreign tourists, especially FITs and to mitigate the seasonal fluctuation in the number of foreign tourists.

Therefore, the first action to be taken is to carry out strategic promotional activities to increase foreign tourists mainly FITs (in all season) and tourists during the off-season (Action 1). For the increased number of tourists, accessibility to tourism products not only Buddhist heritages but also other new tourism products should be improved upon for FITs and to ensure free tourism activities through information, traffic and supporting facilities (Action 2). At the same time, Satisfaction and comfort of tourists should be improved to increase value of tourism products (Action 3), which directly connects with improving value for money (VFM) of tourists. Improved VFM may encourage a higher reputation of Bagan as a tourism destination, hence resulting in consolidation of the position of Bagan in the world as a world-class tourism destination.

On the other hand, increase of FITs can result into longer length of stays and opportunities to visit new tourism products thus linkages to tourism businesses like hotels, guides, restaurants and souvenir shops. It is important for the public sector to lead/support local people to grasp these business opportunities in time to ensure local benefits from tourism development (Action 4).

Finally, tourism is the only one promising industry in Bagan. It is of great necessity to maintain the tourism benefits generated through the actions 1 to 4 to realize a stable economic growth of Bagan.

The relations among the actions mentioned above are illustrated in Figure 4.4.

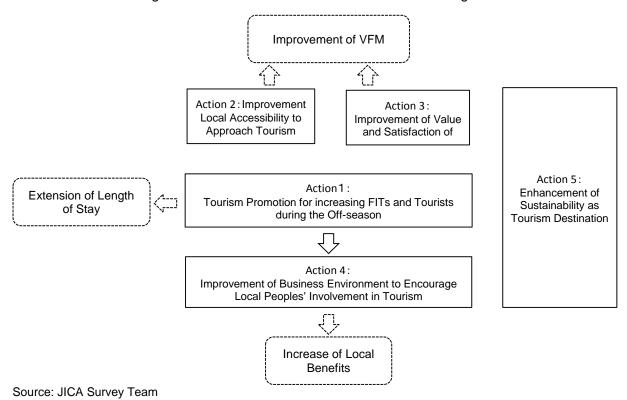


Figure 4.4 Relations among Actions towards Tourism Development at Bagan

4.5 Actions for Tourism Development

4.5.1 Action 1: Tourism Promotion for increasing FITs and Tourists during the Off-season

Promotional activities should be carried out to increase tourists in the off-season and FITs for mitigating the seasonal fluctuation of tourist arrivals. Considering cost-benefits approach in the target of the promotional activities should be focused on. In this regard, target countries would be the countries which have long vacations between April and September like Japan (golden week and summer vacation), Thailand (summer term break at March to May), Korea (summer vacation) and so on.

In addition, promotion of MICE tourism on ASIAN level might be also effective in increasing visitors in the off-season. In brief;

- · Branding of Bagan
- · Promotion of FITs
- Promotion of tourists in the off-season

4.5.2 Action 2: Improvement of Local Accessibility to Approach Tourism Products

In accordance with the increase of individual tourists, it is necessary to build sufficient tourism facilities that the individual tourists freely access as tourism products in Bagan. For this reason, sufficient information, traffic sign board, lights, public transport, cycling on the road and so on, which support access to the tourism products in the area they are provided. Therefore, in brief;

- · Provision of sufficient information for individual tourists
- Improvement of access environment to heritage sites
- Improvement of TIC and traffic signs

4.5.3 Action 3: Improvement of Value and Satisfaction of Tourism Products

Landscape and the Buddhist heritage of temples and towers have indigenous history and stories. Tourist's satisfaction is highest when they share them. In this regard, there are many points to be improved on this matter such as explanation at heritage sites including the Bagan museum, so it is important to improve on the way of explanations and display.

In addition, tourists concentrate in certain Buddhist heritages at the time of sun-rise and sun-set, resulting in harming traditional and desired atmosphere of heritages. Accordingly, it is recommendable to provide more heritages to enjoy sun-rise and sun-set.

On the contrary, Bagan has few places to enjoy free time, supper and shopping like a night bazar and shopping mall at other times of the heritage tour. Therefore it is recommended to develop certain areas to provide such activities as well as beautification of urban areas such as Nyaung-U Town and New Bagan Town to improve on the "sense of arrival" as a tourism destination.

- Improvement in the explanation and display of heritage sites
- Increase of spots to enjoy sun-rise and sun-set
- Beautification of towns and streets
- Improvement of tourist services
- Improvement of tourist guides
- Improvement of safe and security (improvement of tourism medical care)

4.5.4 Action 4: Improvement of Business Environment to Encourage Local People's Involvement in Tourism

A better business environment for tourism is expected to be generated with increase of tourists as well as mitigation of the seasonal fluctuation of visitors arrival in Bagan under the actions 1 to 3. Under this situation, it is simultaneously required to expand the opportunity for local people to get involved in the tourism businesses. For this reason, it is necessary to realize fair competition in tourism businesses by securing fairness, transparency of the tourism business market. It is also necessary to provide certain support to draw new comers in the tourism businesses as well as to improve human resources in tourism sector.

- Development of new tourism products
- Secure an fair tourism business market
- Promotion of tourism investment
- Promotion of public awareness on tourism

· Beginners training for high school students

4.5.5 Action 5: Enhancement of Sustainability as Tourism Destination

It is important for the sustainability of tourism in Bagan to conserve heritage to utilize it longer and safer. Negative effects on the heritage from tourism should be minimized. Clearly distinguish between the heritage to be used for tourism and the heritage excluded. The heritage not to be used for tourism should be prohibited and rehabilitated accordingly.

Many tourists currently seem unsatisfied with VFM on tourism at Bagan. It is a risk to take to keep Bagan as good tourism destination longer. It is necessary to raise the reputation of Bagan by improving and maintaining service quality as well as cost reduction. For this purpose, human resource development is necessary and a trouble-shooting window shall be required.

Finally, it is very important to enhance deep local people's involvement to keep Bagan as the good tourism destination for a longer time. It is very important to organize and sustain a local tourism organization under public and private participation.

In brief the factors include:

- Improvement of accessibility
- Heritage conservation and limit of tourism at vulnerable heritages
- · Revision of quality control system of tourism services
- Establishment of a local tourism organization in Bagan under public and private participation
- · Provision of basic infrastructure
- Continuous supply of workforce (establishment of tourism training school)
- Capacity development of tourism management

4.6 Actions in Phase

There is a sequence (or order) to carry out the Projects along Action 1 to 5 indicated in the section 4.5. The sequence should be determined from size of investment, interrelation among the projects, effects and efficiency of implementation. The proposed project implementation schedule is shown in Figure 4.5, which indicates the project implementation itinerary in short, medium and long terms.

First of all, a branding strategy of Bagan should be clarified and tourism promotion should be carried out based on the branding strategy for increasing FITs in the all seasons and to mitigate seasonal fluctuation of tourists by attracting more tourists in the off-season. At the same time, information targeting individual tourists should be up-graded. Access to tourism sites should be up-graded for the individual tourists together with improvement of tourist information center and traffic sign. To improve value of tourism products in Bagan, explanation and guide of heritage should be improved properly. New sites to enjoy sun-rise and sun-set should be explored and new tourism products should be promoted. On the other hand, training courses to improve tourism services and tourism guide should be carried out with public awareness program and beginners training for high school students. In addition, local tourism organization should be established

under public and private cooperation and capacity development for this new organization should be started in the short term. It is of great importance to establish sufficient scheme and size of the project to be implemented in Bagan through practice of these projects including pilot projects.

In medium and long terms, the projects started in the short term should be continued. In addition, tourism investment should be encouraged and fair tourism business market should be secured. Review of tourism service control measures, heritage conservation and limit of tourism at vulnerable heritages are also to be done. Tourism training school should be invited to be established at Bagan. In addition, pier at River Irrawaddy, which is porposed in the Myanmar Tourism M/P should be implemented to strengthen river cruising tourism.

In the long term, basic infrastructure, beautification of streets and town, improvement of safety and security should be gradually implemented to meet increased demand of the population and tourists in Bagan.

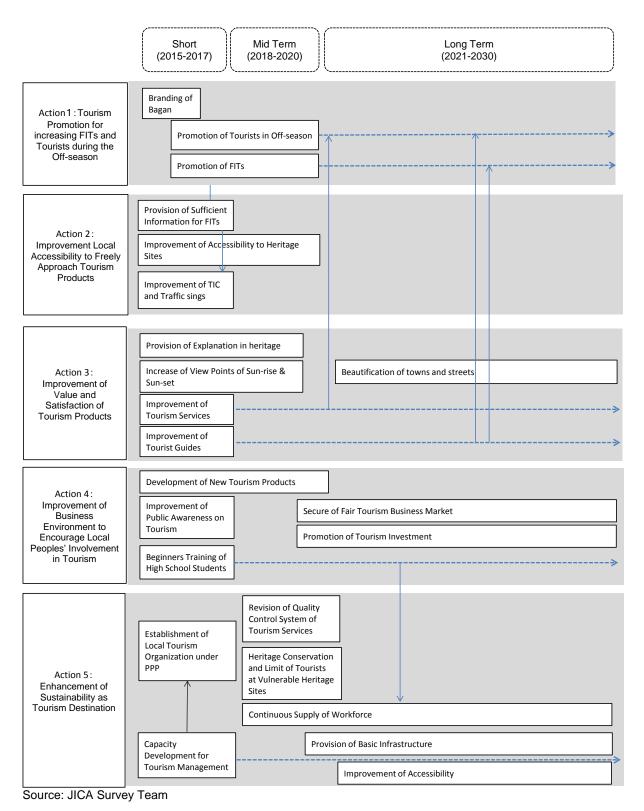


Figure 4.5 Actions by Phase

4.7 Tourism Management, Tourism Infrastructure and Human Resources along the Actions for Tourism Development in Bagan

Actions for tourism development in Bagan mentioned above are to be discussed in details by dividing them into three (3) fields such as tourism management, tourism infrastructure and tourism human resource development in the later chapters. Major projects under the actions 1 to 5 belong to several fields which can be classified in the separated fields in accordance with their necessary expertise, as indicated in Table 4.3.

Table 4.3 Major Projects under Actions for Tourism Development into Tourism Management, Tourism Infrastructure and Tourism Human Resources

| Actions | Tourism Management | Tourism Infrastructure | Tourism Human Resource |
|---|---|---|---|
| Action 1: Tourism Promotion for increasing FITs and Tourists during the Off-season | Branding of Bagan Promotion of FITs Promotion of tourists in the off-season | | |
| Action 2: Improvement Local Accessibility to Approach Tourism Products | Provision of sufficient information for individual tourists | Improvement of accessibility in Bagan Improvement of TIC and traffic signs | |
| Action 3: Improvement of Value and Satisfaction of Tourism Products | | Improvement of explanations and the display of heritage sites Increase of spots to enjoy sun-rise and sun-set Beautification of towns and streets | Improvement of tourist services Improvement tourist guides Improvement of safe and security (Training for improvement of medical care for tourists) |
| Action 4: Improvement of Business Environment to Encourage Local People's Involvement in Tourism | Development of new tourism products Secure fair tourism business market Promotion of tourism investment | | Promotion of public awareness on tourism Beginners training for high school students |
| Action 5: Enhancement of Sustainability as Tourism Destination | Revision of quality control system of tourism services Establishment of a local tourism organization in Bagan under public and private participation | Improvement of accessibility Heritage conservation and limit of tourism at vulnerable heritages Provision of basic infrastructure | Continuous supply of workforce (tourism training school) Capacity development for tourism management |

CHAPTER 5 TOURISM MANAGEMENT

In this chapter, the basic direction and framework of implementation plan and candidates of pilot project are proposed to materialize the strategic direction of future Bagan Tourism described in the previous chapter. The proposals in this chapter are developed based on the results of the survey and discussion with stakeholders in Myanmar. They shall be subject to be finalized in the next stage of the project.

5.1 Roles of Tourism Management in Bagan Tourism Development

In executing basic policies and the 5 actions shown in Chapter 4, the roles of tourism management are described below.

The roles of the tourism management under Actions are:

- 1) To globally enhance the tourism image and brand of Bagan and Myanmar as well as to update the tourism information through tourism promotion in order to invite more tourists,
- 2) Bagan tourism has significant differences between high-season and low-season. To tackle the gap between high and low-season, promotion of tourists during the off-season emphasizing its available 1, comfortable 2 and economical 3 advantage, is expected to improve on conservation of the heritage sites, accommodation utilization and stabilize employment.
- 3) FIT are dependent on Information from travel agencies but their destination information is directly obtained. The destination itself should formulate the scheme to directly disseminate a wide range of tourism information.
- 4) At the destination, FIT changing from large-scaled group tours, enables tourists to freely conduct activities using their own criteria and their preferences. A large variety of tourism products to satisfy their needs should be prepared.
- 5) The destination's sustainable development cannot be attained without benefits to the local people. Therefore, business opportunities in which many local people can enjoy the tourism benefits shall be expanded.
- 6) Destination management, organization establishment including statute and a plan to secure the sustainable and continuous operation by being funded are required, which is essential to the development of the destination

¹ Low occupancy rate of airlines and accommodation (easy to reserve)

² Not much rain and comfortable climate in Bagan

Economical rate of accommodation, transportation etc. comparing with high-season

Table 5.1 Necessary Measures for Tourism Management from the viewpoint of Strategy Implementation

| Strategy | Tourism Management Activities |
|--|---|
| Action 1: Tourism Promotion for Increasing FITs and Tourists during the Off-season | Improvement and consolidation of Bagan's image Promotion of tourists in the off-season Promotion of FITs |
| Action 2: Improvement of Local Accessibility to Freely Approach Tourism Products | Provision of sufficient information for individual tourists |
| | Introduction of guide materials, hotels and transport for individual tourists |
| Action 3: Improvement of Value of and Satisfaction with Tourism Products | |
| Action 4: Improvement of the Business Environment to Encourage Local People's Involvement in Tourism | Development of new tourism products Secure an open, fair and competitive tourism business market Support entrepreneurs |
| Action 5: Enhancement of Sustainability as a Tourism Destination | Improvement and maintenance of service quality Establishment of proper function of local tourism organization under public-private participation |

Source: JICA Survey Team

5.2 Consideration Matters of Tourism Management to Conserve Heritage

In order to increase the sustainability of Bagan archaeological area and monuments that is a tourism resource, the matters to be considered in the field of tourism management are put in this section. Now the following should be excluded because they have been already advanced or planed by UNESCO initiative: The development of the IMS (Management Plan), updating of the detailed map including the monuments and inventory, human resource and guideline development related to protection and restoration of the mural painting, and review of the museum exhibition.

5.2.1 Awareness Campaign Relating to the Protection and Conservation of Monuments

In order to avoid any damages and acceleration of deterioration by tourism activities, it should be implemented that the awareness about the monument protection and conservation for local people and tourists. In particular;

- In order to promote an understanding of Bagan and the culture, the interpretation and direction board should be installed around the monuments and sightseeing spots.
- Concerning the prohibited behavior and activities around/in the monuments, notices are needed on signboards around/in the monuments and videos at sightseeing spots such as TIC etc. should appear in brochures and tourist maps as well.

5.2.2 Solution to the Hazards

- Since earthquakes are expected to occur in the area, it is necessary to clear out all the hazards and then to install temporary reinforcement or to keep out tourists from the monuments whose area may be classified as dangerous.
- In addition, the monuments which are allowed to be climbed to the upper layer to view

excellent landscapes ought to be limited. Climbing very narrow approaches presents a hazard. It is necessary to consider corrective measures for tourist decongestion and hazards.

5.2.3 Improvement of the Excavation Site of Royal Palace

As mentioned above (2.2.1(5) Excavation Site of Royal Palace), the excavation site is at the Royal Palace in Old Bagan, however, excavation activity has been suspended now. But, the site is open to visitors and it seems to be worth seeing since sidewalks and interpretation signboards have been installed between the cover roofs and the excavation trenches.

- First of all, a resurgence of the excavation is desired. It will help in knowing the exact definition of Bagan because there are clues to knowing the lifestyle of bygone days at the site of the Royal Palace unlike the religious buildings.
- The direction and interpretation signboard should be reviewed. History and other
 information are currently being explained only by text, but it is necessary to devise better
 communication about history and culture in Bagan with tourists from all over the world by
 using illustrations, photographs and other media.
- Acrylic is covered with some high value excavated artifacts (such as pottery), but it should be improved because it is not suitable as a method for preserving them.

5.3 Implementation Plan of the Tourism Management Plan and Pilot Projects

5.3.1 Implementation Items of the Activities

Towards the implementation plan formulation, scheduled concrete implementation items of the activities which come from the first and second pre-survey and current situation described in Chapter 2 are described in Table 5.2 below. In addition, pilot projects shall be implemented as implementation plan tests in the short-and-mid-term, and the results shall be reflected in the implementation plan.

Table 5.2 Implementation Items of the Activities

| Action | Activity | Implementation Items |
|--------|--|--|
| | | Participation in Tourism Fairs (Japan and Thailand) |
| 1 | Improvement and consolidation of Bagan's image | Improvement of Bagan's (Myanmar's)⁴ image by participating in Tourism Fairs. Preparation of promotion materials by producing new copy (advertising slogan) |
| | | Preparation and provision of Brochures/ Maps / DVDs |
| | Promotion of | Material development for low-season introduction |
| | tourists in the off-season | Introduction of green season⁵ through brochures and maps etc. Implementation of FAM Tour |

⁴ Almost half of tourists in Myanmar visit to Bagan. Increase of tourists in Myanmar directly connects to increase tourists in Bagan.

 $^{^{5}}$ "Green season" is another phrase of "rainy season" to avoid negative image of "rain", implying green field.

| Action | Activity | Implementation Items |
|--------|---|--|
| | | Invite tour operators and introduce Bagan's low-season Hold tourism events |
| | | Attract tourists during the low-season by holding new tourism events Attract MICE⁶ |
| | | Intensively promote meetings and incentives⁷ |
| | Promotion of FITs | Product development to expand beyond archaeological tourism (CBT or Eco-tourism etc.) |
| 2 | Provision of | Bagan's Website opening ⁸ |
| | sufficient information for | Provision of detailed tourism information by opening a website specializing in Bagan |
| | individual tourists | Preparation of New Tourism Materials (Brochures/ Maps/ DVDs) Renewal of the Tourist Information Center (TIC) function |
| | Introduction of guide materials, hotels and transport for individual tourists | Improvement of One Stop Service and provision of new guide materials (Brochures / Maps) Improvement of city sightseeing transportation means |
| | | Raise convenience and ensure safety on rental bicycles⁹ |
| | | Improve convenience in horse cart and taxis (fixed price or by meter) Improvement of city transportation means |
| | | Shuttle bus service (connecting airport to downtown) ¹⁰ |
| 3 | | |
| 4 | Development of new tourism products | Improvement of night bazaar where the local people set up shops Handicrafts (Souvenirs) quality improvement and opening a sales display site |
| | • | Permanent installation of a market and exhibition hall |
| | Secure an open, fair and competitive tourism business market | Revise the hotel ratings (stars) |
| | | Mitigation of foreigners' accommodation regulation |
| | | Ensure that foreigners can stay in every accommodation |
| | Support entrepreneurs | Investment zoning consideration for new hotels 12 |
| 5 | Improvement and maintenance of service quality | Increase the number of tourist police and train the police (languages/tourism guides) Installation of AED Equip first aid kids (with tour guides and in temples) |
| | Establishment of proper function of local tourism organization under public-private participation | Formulation of BTA (Bagan Tourism Association) Formulation of BTC (Bagan Tourism Committee) BTC is formulated supported by BTA and MoHT. |

Source: JICA Survey Team

⁶ MICE: Meeting, Incentive, Convention/Congress, Event/Exhibition

MICE can be held throughout all year round to attract tourists in low-season.

Current H/P of the MoHT is developed by private company. The MoHT bears a part of maintenance cost. Website of Bagan should be maintained by the local tourism organization. Accordingly, financial sustainability of the Web-site of Bagan is important point to discuss in further project.

⁹ Transparency with common tariff, provision of parking lot at heritage sites to prevent property loss, , bike tour

with tourist guide for safety, etc.

10 A travel agent plans to hold shuttle bus service for airport transportation in last year, however, it fails without agreement from transport companies.

Night bazar is planed after opening of city market. The opening is planned in 2015, however, it may open earlier in 2014 due to strong request from the union minister.

Among the hotel zone 1 to 4, only zone 1 is agreed with the MoCul. To respond the increase of demand on hotel rooms, it is necessary to discuss to set up new hotel zone or to continue to discuss with the MoCul on existing hotel zone 1 to 3.

*Pilot Projects to be implemented are described in Bold italics

Implementation Items of the activities (Table 5.2) are arranged by Short-term (first year), Mid-term (second year) and Long-term (third year) in Table 5.3 as described below. This schedule shall be the implementation schedule for formulation of the implementation plan.

Table 5.3 Implementation Items by Activity Period (Short-term, Mid-term, and Long-term)

| Action | Activities | Short-term | Mid-term | Long-term |
|----------|--|---|--|---|
| | Improvement and consolidation of Bagan's image | Preparation of promotion materials by creating new copies(advertising slogan) | Participation in Tourism Fairs (Japan and Thailand) | - |
| Action 1 | Promotion of tourists in the off-season | - | Material development for off-season introduction Implementation of FAM Tour | Hold tourism events Attract MICE |
| | Promotion of FITs | - | Product development to expand beyond archaeological tourism (CBT or Eco-tourism etc) | - |
| | Provision of sufficient information for individual tourists | Bagan's Website opening Preparation of New Tourism Materials (Brochure/ Maps/ DVD) | - | - |
| Action 2 | Introduction of guide materials, hotels and transport for individual tourists | - | - | Renewal of the Tourist Information Center(TIC) function Improvement of city sightseeing transportation means Improvement of city transportation means |
| Action 3 | - | - | - | - |
| | Development of new tourism products | - | Improvement of night bazaar where the local people set up shops Handicrafts (Souvenirs) quality improvement and opening a sales display site | - |
| Action 4 | Secure an open, fair and competitive tourism business market | - | - | Revise the hotel ratings (stars) Mitigation of foreigners' accommodation regulation |
| | Support entrepreneurs | - | - | Investment zoning consideration for new hotels |

| Action | Activities | Short-term | Mid-term | Long-term |
|----------|---|------------|--|--|
| | Improvement and maintenance of service quality | - | Installation of AED Equip first aid kids (with tour guides and in temples) | Increase the number of tourist police and train the police (languages /tourism guides) |
| Action 5 | Establishment of proper function of local tourism organization under public-private participation | - | Formulation of Bagan Tourism Operation Committee | Formulation of Bagan Tourism Operation Organization |

Source: JICA Survey Team

5.3.2 Implementation Flow of the Activities

As per the attached document

5.3.3 Baseline Survey Implementation geared towards Foreign Tourists

The following surveys are conducted in Bagan to research the action and expenditure of foreign tourists to the area. Furthermore, in order to compare the feature of them in Bagan, the surveys in Yangon are also conducted collectively.

These outcomes of the surveys are taken as basic data, for a marketing plan, promotional planning, tourism product development etc. of the implementation plan.

In Bagan, the survey of foreign tourists has not be carried out in the past, but the average length of stays, travel expenditure, their activities are inferred from interview with Working Group..

In order to lengthen their stay from selection of targets and grasp of their travel activities, and to develop new tourism products (CBT/eco-tour), a survey for foreign tourists is indispensable. This survey is desired to be conducted by mainly WG!

As it is said that "no strategy without statistics", MoHT recognizes an importance of tourism statistics and therefore creates the department of statistics when reforming the organization structure. Formerly the department of recreation was in charge of statistics but had not almost conducted any surveys before.

| Survey Name: | Trends survey on foreign tourists visiting Bagan | | |
|---------------|---|--|--|
| Target: | Foreign tourists visiting Bagan (the number of samples:300) | | |
| Survey Items: | Nationality, ages, gender, tourism type (group, individual) Length of stay, places visited Expenditure and consumption of souvenir purchases Accessibility to tourism information Satisfaction level (accommodation, tourism facilities and tour guides), complaints and comments | | |
| Methods: | Interview survey using questionnaire by surveyors | | |
| Periods: | First survey within 3 months after project start (high season) will be conducted and analysis of the results done over approximately 2 months. | | |
| | Survey will be performed twice (high season and low-season). | | |

| Survey Name: | Trends survey on foreign tourists visiting Myanmar | | |
|---------------|--|--|--|
| Target: | Foreign tourists visiting Myanmar (the number of samples:500) | | |
| Survey Items: | Nationality, ages , gender, tourism type (group, individual) | | |
| | Length of stay, places visited | | |
| | Expenditure and consumption of souvenir purchases | | |
| | Accessibility to tourism information | | |
| | Satisfaction level (accommodation, tourism facilities and tour guides), complaints and comments | | |
| Methods: | Interview survey using questionnaire by surveyors in Yangon International | | |
| | Airport | | |
| Periods: | First survey within 3 months after project start (high season) will be conducted and analysis of the results done over approximately 2 months. | | |
| | Survey will be performed twice (high season and low-season). | | |

5.3.4 Formulation of Implementation Plan

The JICA survey team will formulate a Bagan tourism management implementation plan (for details: see 5.3) whose implementation goal shall be extend to 2020, based on the survey results described above and on the tourism destination vision (image of Bagan), by collaborating with the tourism management WG1.

5.3.5 Implementation of Pilot Projects

MoHT and JICA shall select pilot projects to be implemented. The JICA study team will formulate a detailed implementation plan for the pilot projects which are to be selected in the Tourism Management WG1. The pilot projects (details: see 5.4) will be implemented by the initiative of WG1.

5.3.6 Pilot Project Monitoring and Feedback

Tourism Management WG1 initiatively conducts periodical monitoring of pilot projects. The monitoring, in principle, shall preferably be performed on a quarterly basis.

This process will be implemented throughout the project. Based on the monitoring results the tourism management projects shall be improved and revised. In addition, through this process the tourism management plan's model on community tourism development shall be formulated, moreover revision of the implementation plan shall be conducted regularly.

5.4 Implementation Plan

The Destination Management Implementation Plan's goal shall be the establishment of a tourism management organization which is necessary to continuously implement the 5 actions shown in the Bagan tourism development strategy in Chapter 4. Therefore, the implementation plan shall be formulated taking into account the five points listed below.

5.4.1 Challenges

- It has not been long since Myanmar began actively working on tourism, therefore, recognition and awareness is growing gradually as a destination. In addition, due to the long period in which there was sluggish tourism, the Myanmar (Bagan) tourism situation is not precisely recognized by tourists. Moreover, the Bagan Buddhist heritage' brand is not as characterized and differentiated as compared with other Asian countries including neighbouring countries.
- Although Bagan's main tourism draws archaeology, a variety of tourism products are required to satisfy more of the tourists' needs and preferences. A wide range of activity choices are necessary for stable and sustainable destination development (ADB M/P Strategic Program 3).
- Destination management requires local tourism management organizations under public-private partnership. Although in Myanmar public initiative organization formulation is a prescribed course, the organization formulation as well as the regional one¹³ shall be assisted in order to fully functionalize the organization..
- In addition, the basic tourism data necessary for tourism strategy formulation to tackle tourism challenges including the ones mentioned above is insufficient. Tourism statistical data enrichment (especially tourist trends) shall lead to the enhancement of plan and outcome of the projects..

5.4.2 Planning of the Implementation Plan

(1) Expected Outcome

1) Establish Bagan's leading destination status by improving its image and brand

Buddhist heritage status as a must-see sightseeing site (brand) shall be enhanced through improvement of its name recognition and value, leading to reinforcing competiveness as a Myanmar national destination.

2) Enhance the satisfaction (MFV) of tourists by diversifying tourism products which bring benefits to the locale

Sustainable tourism development requires the local people's understanding of tourism and tourism benefits to the locality. Tourism products' diversification shall satisfy a variety of tourist demands (especially FIT), leading to an increase in the repeat rate and the number of potential customers.

3) Bagan's destination management organization and its operation plan are formulated in the mid-and-long term

To achieve sustainable destination development, a destination management organization which sustainably and continuously manages the destination is required. In addition, fund

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¹³¹³ Mandalay region (including Bagan) tourism management organization

source securement for the organization' self-sustained operation is a potential challenge. Therefore a plan to secure the funds is important.

(2) Contents of the Implementation

The contents of the implementation are described below.

- Based on the results of the baseline survey, the current situation of Bagan tourist trends will be evaluated.
- According to the Bagan tourism development strategy, the below-mentioned plans (Implementation Structure, Operation Plan and Schedule) were formulated.
 - 1) Diversification of tourism products
 - 2) Image and brand establishment
 - 3) Formulation of promotion plan
 - 4) Upgrade quality of service for tourists
 - 5) Enhancement of providing tourist information
 - 6) Encouragement for participating tourism business
 - 7) Management organization establishment
- Implement pilot projects in compliance with the implementation structure and operation proposed in the implementation plan.
- The tourism management organization establishment implementation plan is reviewed and revised, taking into account monitoring results of the pilot projects.

(3) Implementation Structure

The stakeholders and their roles in the Implementation Plan are indicated below.

| Institutions | Roles | | | |
|------------------|--|--|--|--|
| | Decision-making in JCC | | | |
| MoHT | Provision of Counterpart | | | |
| | Participation of planning process of Implementation Plan | | | |
| MoUT Pagan | Participation in the WG1 | | | |
| MoHT Bagan | Provision of Counterpart | | | |
| | Comments on the Implementation Plan | | | |
| WG1 | Pilot projects implementation and monitoring | | | |
| | Implementation of the Implementation Plan | | | |
| | Operation assistance to WG1 | | | |
| IICA guryov toom | Formulation of Implementation Plan | | | |
| JICA survey team | Technical assistance on pilot projects | | | |
| | Review and improvement of Implementation Plan | | | |

(4) JICA's Input

In conducting the Implementation Plan and pilot projects, the four experts mentioned below are required.

- Tourism Marketing: Formulation of Implementation Plan including overall tourism management organization plan
- Tourism Promotion: Formulation of Implementation Plan including overall tourism management organization plan
- CBT(Community-based Tourism)
- · Tourism related regulations

It is recommended to establish structures where experts who can advise on specific themes are to allowed their input.

(5) Sub-Contract Survey

1) Survey Name: "Trends survey on foreign tourists visiting Myanmar"

Survey Costs: Two million yen (the number of samples: 500) \times 2 (high-season and low-season)

2) Survey Name: "Trends survey on foreign tourists visiting Bagan"

Survey Costs: One million yen (the number of samples: 300) \times 2 (high-season and low-season)

(6) Implementation Schedule

First year: Formulation of an Implementation Plan (Planning Periods:6 months)

Second year: Implementation of Implementation Plan

Third year: Analysis of monitoring results of the pilot projects and necessary revisions shall be conducted.

5.5 Pilot Projects

5.5.1 Objectives of the Pilot Projects

Objectives of the pilot projects are the five points described below.

- Investigate effective method to promote FIT in all seasons and tourists in the off-season
- Provision of sufficient information through maps, pamphlet and Web to encourage individual tourists (mainly FIT) free activities in Bagan
- Clarify effectiveness and problems on new tourism product development in particular CBT and eco-tourism
- Design a system that enables tourism management organizations to stably and continuously operate by themselves.
- Formulate an effective Implementation Plan by revising draft based on the learnings from the pilot projects

5.5.2 Long list of Pilot Projects

In the 1st Working Group meeting in this survey (4th and 5th June, 2014), the pilot project candidates were adapted as described below. These candidates were adopted as projects which are to be part of the tourism human resources development plan, a project where mid-term plan effectiveness is demonstrated, and as a project for reinforcing the basis of the mid-term plan implementation.

Table 5.3 Long List of Pilot Projects (Tourism Management)

| Objective | Category | Name of Project | Counterpart |
|---|---|---|-------------|
| | Conservation and repair of heritage sites | Conservation and repair of heritage sites | MoCul |
| Sustainability of tourism resources | | Secure the budget for conservation and repair of the heritage sites | MoHT |
| lourism resources | Protection of the surrounding area | Update of inventory data | MoCul |
| | | Control of development permission | GAD |
| Enhancement of tourism investment | Enhancement of foreign investment | One stop service | MoHT |
| | | Website opening | MoHT |
| | Information and sharing | Preparation of promotion | MoHT |
| | | Grading of tourism industry | MoHT |
| | Tourism event | Participation in tourism EXPO | MoHT |
| Marketing and Promotion | | Tourism event | MoHT |
| | | FAM tour | MoHT |
| | | Media planning | MoHT |
| | Tourism Promotion | Capacity building of government structure | MoHT |
| | Tourism Fromotion | Public support to tourism business | MoHT |
| | | Souvenir development | MoHT |
| | Local products | Locally based products and consumables | MoHT |
| Benefit for the local | Diversification and | Community-based tourism | MoHT |
| economy | Local Community | Eco-tourism | MoHT |
| Sustainability as Tourism Destination | Formulation Tourism Management Organization | Formulation Tourism Management Organization | MoHT |

Source: JICA Study Team

5.5.3 Selection of the Pilot Projects

(1) Criteria

The Objective of the pilot project implementation is to establish and reinforce the tourism management organization through the implementation by clarifying the challenges and problems in the implementation plan. In addition, by revising the implementation plan the effectiveness of the plan shall be enhanced. Therefore, 1) Urgency, 2) Contribution to Strengthen Local Organization, 3) Project Completion within 3 years, 4) Cost Performance, 5) Local Benefits, 6) Permission from MoCul, and 7) Environmental and Social Impacts, are the evaluation criteria that are to be utilized for the selection of the pilot projects.

(2) Short list of the Pilot Projects

In the 2nd Working Group Meeting (24thJune, 2014) in this survey, a shorter list was formulated from the long list according to the criteria mentioned above, judging their priority in three stages (A/B/C).

Table 5.4 Short list of Pilot Projects (Tourism Management)

| Pilot Project | Project Complet ion within 3 years | Permissi on from MoCul | Environ mental and Social Impacts | Contribu tion to Strength en Local Organiz ation | Urgency | Cost Perform ance | Local Benefits | Total |
|---|--|------------------------------|---|---|---------|-------------------------|-------------------|-------|
| Conservation and repair of heritage sites | С | - | - | | | | | |
| Secure the budget for conservation and repair of the heritage sites | С | - | - | | | | | |
| Update of inventory data data | С | - | - | | | | | |
| Control of development permission | С | - | | | | | | |
| One stop service | С | | | | | | | |
| Establishment of Web Site | Α | - | - | В | А | Α | В | Α |
| Development of New Tourism Materials (maps, brochure, DVD etc.) | А | - | - | В | А | В | А | А |
| Grading of tourism industry | С | | | | | | | |
| Participation in Tourism Fairs | А | - | - | В | А | В | А | А |
| Tourism Event | А | - | - | В | В | С | В | С |
| FAM Tour at Bagan | А | - | - | С | А | А | А | А |
| Media Planning | Α | - | - | С | Α | В | С | В |
| Capacity building of government structure | С | | | | | | | |
| Public support to tourism business | С | | | | | | | |
| Arts and Crafts Demonstration and Participation Program | А | - | - | С | В | В | В | С |
| Locally based products and consumables | С | | | | | | | |
| Community -based Tourism | А | - | - | С | В | В | А | В |
| Eco-tourism | А | - | - | С | В | В | А | В |
| Formulation of Tourism Management Organization | А | - | - | А | А | А | А | А |

Source: JICA Survey Team

(3) Participation in Tourism Fairs

Tourism fair is a good opportunity for the country without its own government tourist office in the world to promote for travel agents and ordinary tourists. Tour operators in Myanmar have participated in ITB Berlin and WTM London of three well known travel fairs in Europe (Berlin/London/Milan) from 18 years before and they has achieved to successful impact..

On one hand, the Asia market attracts attention as an emerging market, the Japanese market is particularly recognized as a promising market, MoHT and the Minister as well as private sectors has requested Japanese cooperation with their exhibition in Tokyo at the beginning of this survey.

As the low season of Bagan overlaps with the Japanese tourist season, it is considered participation in Tokyo is modelled for other Asian nations (China, South Korea, etc.).

On the other hand, Thais to Myanmar can also travel enough on lowf-season, such as pilgrimage, contribution to a temple, etc. as the main purpose. Moreover, Thais to visit the Buddhist sites (Buddha Gaya, Luangprabang) is remarkably increasing, which suggests the growth of Thai to Bagan.

Recently, as private sector of Myanmar tourism is beginning to pay attention to Vietnam and North Europe as a new market, selection of travel fairs participating needs further discussion..

| Pilot Project | Participation in Tourism Fairs (Japan, Thailand) |
|---------------------|---|
| Projected Results | Improvement in Bagan's image and brand awareness in both countries. |
| Details | In cooperation with private businesses at both fairs, put Myanmar on display with an emphasis on leisure tourism. Prepare, display, and distribute new tourism-related materials to provide this information (brochures, maps, DVDs, etc.). In conjunction with these efforts, run a special seminar in order to raise knowledge and awareness within the tourism industry. |
| Participating Orgs. | MoHT, MTF, WG1 |
| Preparation | Myanmar-side:MoHT chooses participants, tourism materials Japan-side:fair venue, participant's travel expenses, seminar venue |
| Outsourcing | Allowed |
| Schedule | 2 nd year: Japan (Sept. 2015), Thailand (Feb. 2016) |
| Approx. Cost | JPY4,000,000 (2 years) Japan: JPY2,500,000 (venue: JPY1,000,000, travel: JPY300,000, seminar: JPY500,000 other: JPY500,000 Thailand: JPY1,500,000 (venue: JPY600,000, travel: JPY400,000, seminar: JPY300,000 other: JPY200,000 |

(4) Run a FAM (Familiarization) Tour

The Japanese tourism industry has yet to discover Myanmar's charm, and its knowledge of and familiarity with Myanmar and Bagan remains low. This has led to few package tours. In particular, the industry tends to avoid creating packages which coincide with the rainy (off) season. The largest number of trips abroad originating from Japan occur during Japan's summer vacation period (July – August, Bagan's low-season). For Thailand, the largest number of trips abroad occurs during Songkran in April.

Similarly, the tourism products aimed at Myanmar and Bagan have become well established and entrenched, leading to a need for the development of new products in order to increase the number of days stayed as well as the number of tourists visiting during the off-season.

A seminar aimed at the Japanese tourism industry will be held in order to increase awareness of Bagan and encourage the development of new tourism products. The seminar will be held in the off-season of May/June, 2015-2016 in order to emphasize the appeal of the off-season. In order to ensure that the seminar is not be attended by only industry players already involved in Myanmar, we will cooperate with JATA to encourage attendance by new industry players. Business meetings with members of the Bagan tourism industry will also be held during the trip and seminar.

| Pilot Project | FAM Tour | |
|--|--|--|
| Projected Results | Increase awareness of Bagan and encourage off-season products. | |
| Details | Run a FAM tour for (mainly) tour-planners from Japanese travel firms during the off-season in order to increase awareness of Bagan and emphasize the appeal of the off-season. This should help promote the development of new products. | |
| Participating Orgs. | MoHT, MTF, WG1 | |
| Preparation | Myanmar-side: seminar venue (hotel/restaurant in Bagan), seminar lecturer, tour-guide, etc. Japan-side: fees for travel and lodging, transportation in Myanmar (bus), etc. | |
| Outsourcing Allowed | | |
| Schedule 2 nd year: two sessions (Kanto and Kansai regions), approx. 15 peo | | |
| Approx. Cost | JPY4,000,000 (JPY2,000,000 x 2 sessions) (travel: JPY1,200,000, lodging: JPY500,000, transportation/othe JPY300,000) x2 | |
| *Other | Gain cooperation from each region's parties to the greatest extent possible (i.e.: have Myanmar Airlines co-operated with travel from Osaka). Media planning also will include a prominent blogger on Facebook. | |

(5) Developing New Brochures and Maps

Brochures, maps, and other promotional materials ideally increase a prospective tourist's desire to travel while also supplying relevant and useful information. Unfortunately, the materials currently available for Bagan are both outdated and lacking in terms of useful information. Their production quality (photography, paper quality, textual information) also leaves much to be desired

New promotional brochures and maps for tourism promotion (tourism fairs and seminars, etc.) will be printed and produced. These materials will improve Bagan's image by re-examining image choice, phrasing, and slogan choices. Maps useful to non-group tour tourists (including at-a-glance information on historic ruins, accommodations, transportation, restaurants, souvenir shops, etc.) will also be produced. Information regarding the "Green Season" will also be provided in order to improve on the negative image associated with the off (rainy) season.

| Pilot Project | Creation of new (tourism) promotional materials | | |
|---------------------|---|--|--|
| Projected Results | Creation of off-season products and increased accessibility for new tourists. | | |
| Details | Create promotional materials (i.e.: brochures, maps, DVDs) featuring new information on Bagan (including information on the off-season) | | |
| Participating Orgs. | MoHT, MTF, WG1 | | |
| Preparation | Myanmar-side: provide location research, other tourist information, etc. Japan-side: cover expenses, location research, etc. | | |
| Outsourcing | Allowed | | |
| Schedule | Create in the 1 st year. | | |
| Approx. Cost | JPY4,000,000 (Brochures: JPY1,500,000, Maps: JPY1,000,000, DVDs: JPY1,000,000, Contingency fund: JPY500,000) | | |
| *Other | In conjunction with this project, create a plan to regularly update the materials. | | |

(6) Establish a Web-Presence for Bagan

While there are numerous websites providing information on Myanmar (i.e.: from the Ministry of Hotels and Tourism, and the MTF), they are focused on Myanmar as a whole and do not offer an abundance of information on Bagan. There is currently no website dedicated to offering information on Bagan.

An official tourism website for Bagan will be established. It will offer useful information for tourists, including information on how to get to Bagan, transportation within Bagan, travel routes for visiting historic sites, accommodations, restaurants, and information on the surrounding area. It will also provide information targeted toward travel companies (i.e.: promotions) and corporate customers (i.e.: MICE information). It will also provide a library of downloadable photos available to (i.e.) travel companies in order to encourage the promotion of Bagan. An official Bagan Facebook page will also be established to provide regular updates. The Facebook page will work in conjunction with the website in order to facilitate regular updating.

Furthermore, a link exchange will be done with the homepages' of the MTF and Ministry of Hotels and Tourism.

| Pilot Project | Establish a Web-Presence (Homepage) for Bagan |
|---------------------|---|
| Projected Results | Increase the rate at which Bagan is chosen as a tourist destination by providing easily-accessible and useful information. Improve adoption of off-season tourism by promoting its merits. Increase the time spent in Bagan by featuring a wide variety of possible travel and sightseeing options. |
| Details | Provide detailed information (see above), MICE information, and have the site introduced through a link exchange with the Tourism ministry. Establish an official Bagan Facebook page. |
| Participating Orgs. | MoHT, MTF, WG1 |
| Preparation | Myanmar-side: Site-management (location, administrator) Japan-side: Cover website development expenses, link exchange expenses, etc. |
| Outsourcing | Allowed |
| Schedule | 1 st year: April-Sept. 2015 |

| Approx. Cost | JPY3,500,000 (Development: JPY2,000,000, Computers: JPY500,000, Other administrative expenses: JPY1,000,000) |
|--------------|--|
| *Other | N/A |

(7) Community Tourism

In "Responsible Tourism" used as the prototype of Myanmar Tourism M/P, it is stated as "that creates better places for people to live in, and better places to visit". Moreover, "Support CBT (Community-based Tourism) which benefits local residents" is clearly written as one of the means to implement M/P.

A village where tourists can experience traditional Bamar culture is located on the road which connects the major areas of Old Bagan, New Bagan, and Nyaung-U. There, tourists can experience and learn about things such as traditional textiles, products of cane, manufacturing wheel of cattle-cart. Products such as village homestays as well as activities with villagers (lasting 1-2 hours) are also available for tourists from Europe and North America who are staying for an extended period, but with few introducing brochures, many visitors has not visited there.

In WG1, the one-day tour which includes a MYITCHE village located at the opposite shore of Bagan as a candidate of CBT is recommended. After boarding a boat and a cow carriage, visitors walk around MYITCHE village which is well known by weaving textiles and overview the river down from the hill in Pakok.

Additional idea for CBT will be discussed in WG1 after analysing the result of trend survey on foreign tourists.

| Pilot Project | Community Tourism | | | |
|---------------------|---|--|--|--|
| Projected Results | Develop products which feature and involve local residents. | | | |
| Details | Develop village tours. Display and sell souvenirs. Develop products (i.e. a night bazaar) which act as business opportunities for the local residents. | | | |
| Participating Orgs. | MoHT, MTF, WG1 | | | |
| Preparation | Myanmar-side: provide sites (for bazaar, souvenir sales, etc.), run workshop(s) with local residents Japan-side: fees for workshop venue, provide fixtures (lights, stands), introductory brochures | | | |
| Outsourcing | No | | | |
| Schedule | 2 nd – 3 rd year | | | |
| Approx. Cost | JPY1,000,000 (Venue: JPY200,000, Materials: JPY500,000, Brochures, etc.: JPY300,000) | | | |
| *Other | Take a wide view of what CBT (Community-Based Tourism) encompasses and also include (i.e.) souvenir sales and development, and night bazaars. | | | |

(8) Eco Tourism

Along with CBT, eco-tourism is also one of the desired tourism products other than historical sight visits, which is recommended by Myanmar tourism M/P and the Minster. Furthermore, since eco-tourism is supervised by MoECAF, it is also suggested to be implemented from a

viewpoint of other ministries' cooperation.

In Bagan, MoECAF designates as eco-tourism site, 1) Mt. Popa, 2) Law Ka Nandar Forest and 3) Ze Oo Village. But Law Ka Nandar Forest and Ze Oo Village have not been well developed as eco-tourism site due to lack of well-paved access roads. At present, eco-tourism of Mt. Popa is most feasible.

Mount Popa and Salin are near Bagan. The most commonly offered tours are 1-day affairs operating out of Bagan which visit the rock-walled Taung Kalat Buddhist monastery and the rare-for-Myanmar wooden monastery in Salin. Mt. Popa, (1,518m) a precious natural resource home to many rare animal species, also features a single resort hotel. However, none of the tour companies had brochures featuring single day tours for tourists not already on a package tour. There is a need to diversify the one-day tours offered out of Bagan and for established tour companies to develop and effectively market them to tourists not on package tours.

| Pilot Project | Eco Tourism |
|---------------------|--|
| Projected Results | Develop environmentally friendly products (establish new routes). Diversify offerings to increase time stayed. |
| Details | Develop new tours which minimize the impact on historic ruins. Encourage the development of new eco tours. |
| Participating Orgs. | MoHT, Ministry of Culture, Ministry of Environment and Forests, MTF, WG1 |
| Preparation | Myanmar-side: provide sites (for bazaar, souvenir sales, etc.), run workshop(s) with local residents Japan-side: fees for workshop venue, arrange sample tours, introductory brochures |
| Outsourcing | No |
| Schedule | 2 nd -3 rd year. |
| Approx. Cost | JPY1,000,000 (Workshop venue fees: JPY200,000, Brochures: JPY300,000, Sample tours/other: JPY500,000 |
| *Other | Improve the environment for eco-tourism and reduce the impact on historic sites. |

(9) Tourism Management

There is a need for a DMO (Destination Management Organization) presenting a unified front for both private and public interests. As a DMO is currently not present in Bagan, a working group will be established to facilitate the implementation of the above pilot projects. This working group will lay the foundation for a DMO. The standard procedure is to have the Myanmar Ministry of Hotels & Tourism take the lead in establishing an ADB M/P. As such, the formation of a DMO will follow this precedent.

| Pilot Project | Establishment and Development of a Tourism Management Organization | | | | | |
|-------------------|--|--|--|--|--|--|
| Projected Results | Establishing a DMO and laying the framework for successful long-term | | | | | |
| Projected Results | operation. | | | | | |
| Details | Conduct training for staff involved in tourism-related activities (tailoring it to the | | | | | |
| Details | size of each respective restaurant/hotel, i.e.: standard, medium-sized, etc.) | | | | | |
| Participating | MoHT, MTF in Bagan | | | | | |

| Orgs. | |
|--------------|--|
| Preparation | Myanmar-side: the Ministry of Hotels & Tourism will provide personal, MTF will provide personal from Yangon. Japanese-side: venue fees, (partial) domestic travel fees for ministry personal, (partial) domestic travel fees for MTF personal from Yangon, etc. |
| Outsourcing | Not anticipated. |
| Schedule | 1 st -3 rd year: 4 times a year x 3 years = 12 times |
| Approx. Cost | JPY2,400,000 (JPY200,000 x 12 times) (travel: JPY60,000, venue: JPY100,000, other: JPY40,000) x 12 |
| *Other | Fees for accommodations will be decided at a later date. |

Although it is outside the defined scope of this project, possibilities exist for study exchanges between each country's respective counterparts and engaging in study tours hosted by other countries. Experience with successful examples from Japan and other countries in the region will greatly contribute to successful tourism management.

As there seems to be interest in Japan's "Tourism Associations" and "Tourism Federations," training in Japan should be particularly productive. There would also be benefit in examining the tourism organizations of places such as Angkor Wat, Luang Prabang, and Borobudur, all of which also host Buddhist sites.

CHAPTER 6 TOURISM INFRASTRUCTURE

In this chapter, basic direction and framework of implementation plan and candidates of pilot project are proposed to materialize the strategic direction of future Bagan Tourism described in the chapter 4. The proposals in this chapter are developed based on the results of the survey and discussion with stakeholders in Myanmar. They shall be subject to finalize in the next stage of the project.

6.1 The Role of Tourism Infrastructure in Bagan Tourism Development

The main roles of tourism infrastructure in Bagan are:

- To immediately stimulate the activities of achieving the "Basic Policy" as shown in section 4.4.1, by building up the currently insufficient infrastructure for tourists.
- To enable activities for continuously achieving the "Basic Policy" regarding the necessary infrastructure for the Mid-Long Term Plan of increasing the number of tourists as shown in section 4.4.2 "Target of Bagan Tourism Development."

In order to conduct the strategy as shown in Chapter 4, the necessary roles and activities in tourism infrastructure are organized in "Actions" below:

Table 6.1 The Necessary Measures in Tourism Management from Strategy Implementation's Point of View

| Strategy | Activities of Tourism Infrastructure | | | | | |
|--|--|--|--|--|--|--|
| Action 1: Tourism Promotion for increasing FITs and Tourists during the Off-season | | | | | | |
| Action 2 Improvement of Local Accessibility to Approach Tourism Products | Improvement of access environment to heritage sitesImprovement of TIC and traffic signs | | | | | |
| Action 3: Improvement of Value and Satisfaction of Tourism Product | Improvement in the explanation and display of heritage sites Increase of spots to enjoy sun-rise and sun-set Beautification of towns and streets Improvement of safe and security | | | | | |
| Action 4: Improvement of Business Environment to Encourage Local People's Involvement in Tourism | | | | | | |
| Action 5: Enhancement of Sustainability as a Tourism Destination | Improvement of accessibility Heritage conservation and limit of tourism at vulnerable heritages Provision of basic infrastructure | | | | | |

Source: JICA Survey Team

6.2 Regulations of Infrastructure Development to Conserve Heritage

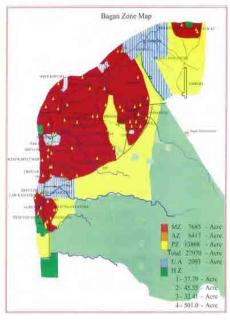
6.2.1 Legal Provisions

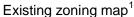
(1) Existing State Laws on Heritage Conservation

To develop infrastructure, it is necessary to observe the existing laws shown in section 2.2.2 Landscape and Development Regulations because Bagan contains many protected zones: namely, Ancient Monument Zone (MZ), Ancient Zone (AZ), Protected and Preservation Zone (PZ) and Archaeological Zone in their generic term.

(2) Local Laws on Heritage Conservation

The zoning regulation is the local one related to infrastructure development. In 2013, the authority issued another new regulation on conservation and development of the zones in order to amend/add rules, seemingly, with some attention to a balance between the current development and conservation. Development of Infrastructure in the zones needs to be approved by the Ministry of Culture under both the State Law and the Local Regulation. Therefore, any plans on the development should be progressed, in close consultation with the concerned government ministries including the Ministry of Culture.







Post installed in the zoning boundary

Bagan has five zones. The following left three zones, classified as "Archaeological Zone", out of five, shown in the table below, are associated with monuments.

-

¹Note that there are mistakes in the map. Red; MZ, yellow; AZ, light green; PZ, vertical stripes; UZ, dark green; HZ and the lightest green; villages.

| | | Archaeological Zone | | | |
|---|--|--|--|--|---|
| Zone | Ancient Monument Zone (MZ) | Ancient Zone (AZ) | Protected and Preservation Zone (PZ) | Urban Zone (UZ) | Hotel Zone (HZ) |
| Area(ha) | 2,610 | 3,140 | 5,460 | 847 | 250 |
| Description | Zone with most of monuments | Zone with monuments and with mounds to be excavated Buffer zone for MZ | Buffer zone | Residence zone (Linked to MZ, and AZ) | Hotel construction zone (outside MoCul's jurisdiction) |
| | No religious a | nd cultural decoration is available | at accommodatio | n, residence an | d workplace. |
| Limitation of construction, including new construction, extension, and renovation | Basically not allowed ^{⋇1} | Buildings are allowed with following conditions: (A) They take a distance at least 27.43m (90 ft) from monuments. (B) They are smaller than/equal to 9.14m (30 ft) and smaller than/equal to two stories. (C) Basement is not allowed. (D) Buildings for any business and factory are not allowed. On the condition of prior permission and excavation, the construction can be allowed. | Allowed On the condition of prior permission and excavation, the consruction can be allowed. | MoCul ^{×2} + TDC + GAD | MoHT + GAD |
| Laying and repairing of road | Allowed under the following regulations ^{*3} | Allowed | Allowed | | |
| Instillation of signboards | Allowed**4 | Allowed ^{**4} | Allowed ^{**4} | | |
| Planting and pruning etc. | Not allowed | Not allowed | Allowed | | |

- *1 Only in towns, villages, and quarters in the zone, buildings are allowed under the following conditions with prior permission.
- A) Set-back distance at least 27.43 m (90 ft) from monuments.
- B) Height lower than/equal to 9.14 m (30 ft) and lower than/equal to two stories.
- C) Basement is not allowed.
- *2 Added regulations in 2013 raised the limitation to the construction of accommodation, residence, workplace, and business office in New Bagan Town and Nyaung-U Town (except Wetkyi-in) to the Urban Zone.
- A) Buildings are offset a distance of at least 36.58 m (120 ft) from monuments.
- B) Buildings that are smaller than/equal to 12.19 m (40 ft) and smaller than/equal to 3 stories (however; this relaxation was only a temporary solution and returned back to the original height of 30 ft after 6 months in 2014).
- C) Basements are prohibited.
- D) Any kind of factory is prohibited.
- E) Additionally, prior permission is also required. Prior excavation is not required by local law, but by the State Law. So it is necessary to consult with the Ministry of Culture in advance if the excavation is needed.

- *3 With respect to the regulation of road laying in MZ zone, the following conditions shall be abided to:
- A) Colour matches with the archaeological landscape and monuments.
- B) Roads should be offset by 36.58 m (120 ft) away from monuments. (amended from 90 ft in 2013).
- C) The road width should be smaller than/equal to 4.57 m (15 ft).
- D) The depth of excavation is less than 15.24 cm (6 inches) from surface.
- E) Only tarred, earthen, red earthen and gravelled roads are allowed. (added in 2013)
- F) Sidewalks and/or parking lots need to be applied in advance as regulated and to be made along the regulations of the Department of Archaeology, Ministry of Culture.
- G) Highways are forbidden.
- *4 The Department of Archaeology, Ministry of Culture is in the process of installing signboards to let people know the rules.

6.2.2 Consideration in the light of global standards²

The Ministry of Culture has already announced that the authority aims to list the Bagan archaeological area and monuments as World Heritage sites in the future. In light of the announcement, the following matters, together with the State Law, should be considered more on the basis of the criteria advocated by UNESCO and ICOMOS (International Council on Monuments and Sites) in order to formulate and execute the Implementation Plan and Pilot Projects.

First of all, as a premise, UNESCO also recognizes the importance of infrastructure development for the local economic sustainability. It advocates that plans should be made and implemented during the whole process of planning, construction, and operation stages, without the loss of the Outstanding Universal Value (OUV) and with the protection of monuments.

At the planning stage, the following matters should be considered.

- Return of some tourism profits to the conservation of monuments
- Creation of a framework to increase opportunities for local people and entrepreneurs to contact with tourists
- Promotion of OUV to tourists and enlightenment of OUV to local people
- · Urging tourists to go outside the zone of the monuments
- Promotion of preservation of culture, including intangible assets, around the monuments
- · Incorporation of potential declining industries into the framework of tourism

In substantial terms, the following methods are recommended at the stage of implementation:

- No obtrusive object may be added to the landscape.
- Elements of architectural style of local or traditional vernacular shall be fully considered.
- Local materials are to be used in the buildings.
- · They shall have reversibility.

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² "Operational Guidelines for the Implementation of the World Heritage Convention 2013", UNESCO World Heritage Centre

6.3 Direction of Activities and Development Scenario for Tourism Infrastructure

6.3.1 Action 2: Improvement of Local Accessibility to Freely Approach Tourism Products

(1) Access to the Heritage Sites and Parking Space

It is necessary to develop access for light vehicles (E-bikes, bicycles) that can give immediate effect as a short term project within Bagan Archaeological Zone. High synergy effect can be expected by combining it with activities that are linked to this development (route development inside the Archaeological Zone, signs installation, etc.).

1) Moving inside the tourist site

While there are many tourists who move about within the heritage sites using E-bikes or bicycles, there is no exclusive lane for them, and they have to use either the road shoulders or the unpaved areas. Therefore, developing access for E-bikes and bicycles is an option tailored to serve tourist safety and comfort. This project aims to select and develop routes for 22 locations of the heritage sites which were already prioritized by the Department of Archaeology. However, since ancient roads will be revitalized for E-bikes and bicycles, an excavation survey to find out the original surface and underground materials used for the ancient road will be necessary, and activities subject to regulation within heritage sites will take time.

Also, the road width must be at least 3 m since it will be used not only for E-bike and bicycles but also for horse-drawn carriages. It is still not clear whether the ancient specification of pavement can still apply without any modification.

2) Parking space for vehicles and bicycles

At present, there are many cars randomly parked under the shade, near the access road to the heritage sites. Considering the increasing number of tourists in the future, it is necessary to consider developing a controlled parking area, an intraregional traffic system, as well as a method of visitor management. Although paving the road with asphalt can ease maintenance, aesthetically it is not favourable; thus it is necessary to choose the right pavement specification that gives consideration to the aesthetic aspect after thoroughly consulting with the Department of Archaeology, Ministry of Culture.

3) Shade and Resting Area

With almost no shade, resting area, toilets, or drinking fountains, moving about within the archaeological zone is dusty and uncomfortable. Since there might be secondary maintenance problems regarding hygiene issues of the toilets and drinking fountains, it is important to first define the tourist circulation, from the perspective as a World Heritage in regards to the need of consulting with the Department of Archaeology, Ministry of Culture, and then study the necessary functions & locations of amenities for tourists.

(2) Infrastructure development for information center

Action 2 regarding infrastructure developments for information center can be categorized into:

1) information of Bagan heritages, 2) warning and notice within heritage sites, and 3) information of tourism products around Bagan.

Table 6.2 Infrastructure in Action 2 (Information)

| Infrastructure | Information of Bagan heritage | Warning and notice within heritage site | Information of tourism products | Alternative facilities |
|----------------------------|-------------------------------|---|---------------------------------|-----------------------------------|
| TIC | 0 | 0 | 0 | No |
| Orientation Space | 0 | 0 | 0 | Yes Meeting rooms in hotels |
| Training and meeting space | 0 | 0 | 0 | Yes Meeting rooms in hotels |
| Tourism information board | 0 | 0 | 0 | Partially Yes |

Source: JICA Survey Team

1) Tourist Information Centre (TIC)

Bagan's TIC used to sell tickets for bus, boats, planes, as well as conduct hotel reservations, but ever since the commercial department has been transferred to private sector, the current functions are limited to providing maps and giving information about tourist spots. Also, since the condition of facilities is not appropriate (broken AC, no Wifi, cannot get refreshed), tourists are sparse.

It is considered necessary not only to respond to the tourists' needs, but also to review the function of TIC and develop the corresponding facilities in order to contribute the promotion of Bagan tourism.

The most favourable request made by the Bagan hotel association and the restaurant association regarding the development of tourism infrastructure was the construction of a large theatre, because there is no exclusive place to show performances such as puppet shows, dance and music in Bagan which regularly take place in restaurants and hotels instead.

For such a facility with a good acoustic and the seating capacity of more than 100 people, it is budget wise not possible to implement under the pilot project. Therefore it should be integrated in the implementation plan. However, the introduction of a mini theatre with a capacity of 40~50 in TIC is one of many proposals under the pilot projects. In it, a short film can provide tourists with an orientation to the historic background of Bagan as well as brief introduction of local customs, religion, culture compelling appropriate behaviour and supporting safety and comfortable stays of tourists, because by briefly introducing the Code of Conduct at the site, tourists can enjoy a comfortable trip with shared values by the local residents.

In this way, it is also possible to effectuate the warning signs and code of conducts displaying in front of monuments and provide vital information and tips for FIT for them to find important

destination and history of Bagan prior to their visit, thus possible to plan their efficient itinerary.

The table above shows the necessity for infrastructure development of an information center is high in all areas. The Project can be implemented in short term and is expected to have an immediate positive effect. Furthermore these components in turn contribute to Action 3 "Enhancement of value of tourism products and impression".

The site of the current Bagan TIC and Headquarters at New Bagan Town is placed in consideration with the tourists' routes and very suitable for the location of new TIC with tourism training center. However, since the function of meeting and training spaces are available by hiring the private facilities (hotels, etc.), it is necessary to further validate the implementation of this project.

2) Signs and Interpretation Boards

Currently, there are 3 types of signs inside the archaeological zone: direction sign, alerting/ warning, interpretation. Since the conventional wooden sign is vulnerable to termites, and putting durability, visibility, as well as easy maintenance into consideration, wooden signs have been replaced by the steel ones. Firstly, clarify the targeted heritage sites and the connecting tourists' circulation routes, then study the necessary guide display and type as well as location of interpretation boards.

6.3.2 Action 3: Activity plan for improvement of value and satisfaction of tourism products

For improvement of value and satisfaction of tourism products, the most important resources are historical heritages (temples, pagodas and stupas). Therefore the beautiful landscape on which uncountable heritages exist on the vast area of Bagan is the most attractive tourism product. Thus, effective use of this tourism resource is critical for the success of Action 3.

(1) Improvement of descriptions in the heritage site

Description of historical value of sites, style and character from an architectural point of view, human drama in bygone days, all those elements add value on a simple landscape and turn it into a historic landscape with a full of sense of pleasure.

Establishment of descriptions for 22 heritage sites which have been nominated by DOA along with the main tourism routes listed in Action 2 are the most prioritized activity. Those contents can be prepared within a short period. Guidebooks, brochures and applications on smartphones having those contents maybe distributed to tourists and to provide a sense of fulfilment.

In the foreseeable future, those products will gradually increase in a number of sites and routes to include, and extend the information around Bagan in cooperation with the tourism management group.

(2) Museum Exhibition

Till now, exhibit interpretation and notices of the museum exhibitions are not friendly to foreign tourists, as they provide only text in Burmese and sometimes contents are insufficient. The intrinsic academic value of those exhibitions is considered high therefore improvement of showcases, illumination, security and establishment of flow line instantaneously improves the value of the Museum. The Museum has great potential to become the second main attraction in Bagan tourism. Thus as part of the tourism infrastructure development, an implementation plan that includes an improvement of exhibition in the Museum should be considered.

(3) Increase Viewing Spots for Sunrise And Sunset

Peak hours in peak season and places that package tourists gathered most were at heritage sites at the time of sunset and sunrise. Bustling sites full of tourists are not desirable scenery for individual tourists, and portray a negative image of tourism in Bagan.







Ticket check by tourist police at sunset viewing spot

By mitigating concentration of tourists at peak hours, this activity aims at restoring the value of Bagan's landscape as a tourism product as well as increasing FIT's the length of stay as tourists enjoy the scene from a different viewpoint. It is also expected to contribute to Action 5 "sustainability of tourism".

Incorporated in the mid and long term strategy, re-development of infrastructure based on data of tourist behaviour collected by the tourism management group in cooperation with tour agents and the guide association will be necessary. Particularly, the implementation process examined in pilot projects such as in action 2 (development of parking lot) and development of viewing spots at sunset and sunrise needs to be continued by WG in a sustainable manner.

Introduction of bird watching and traditional catchment system are expected to be new tourism products.

(4) Improvement of the Beautiful Scenery in Bagan

The present scenery is a legacy of dynamic change over time of the heritage in the past. Analyzing that, the two important components are the ground and vegetation. Native species (Tamarind: <u>Tamarindus indica</u>, Acacia: <u>Acacia catechu</u>, Teak: <u>Tectona grandis</u>, Ingyin: <u>Shorea</u> <u>Siamensis</u> and so on) used to occupy a large part of the heritage site. However those have

been gradually replaced by exotic invasive species with strong fertility. Deciduous shrubs called *Prosopis juliflora* are among the most influential species in Bagan, having thorns that prevent cattle, people and goats from walking through the bush. It is vital to control those species to restore the view of tourists moving by bicycle and E-bike.



Prosopis juliflora with strong fertility hamper the scenery



Tall *Euphorbia antiquorum* tangled by cribmiers to bock the scenery

Farmlands have extended to the point of surrounding the heritage sites. Although some portions of land are not cultivated and exposed in dry seasons, the cultural landscape of farmland against the background of heritages is a vital component of Bagan's tourism.

This cultural landscape with the mixture of heritage sites and farmland are considered those closest to what it used to be previously. Therefore it is important to employ them after consulting with Department of Archaeology, Ministry of Culture, in consideration of the historical background, as one of the strategic tourism products in Bagan.



Farmland in front with the monument background.
Ordinary scene of Bagan

Cultural landscape with mixture of heritage sites and farmland.
Weeds and wastes need to be treated.

This activity aims at reconstructing the structure of landscape in addition to creation of an aesthetic appearance (e.g. planting species with beautiful flowers alongside approaches) that has been already practiced. By recapturing the landscape from the tourist point of view in tourist flow line, it is important to plan the exhibition of tourist routes and new viewing spots developed in action 2.

The main tasks to be focused on going forward are to maintain and manage the existing landscape rather than to develop additional infrastructure. Thus in the implementation plan, it is

necessary to study the methodology of monitoring.

Currently distribution of overhead electrical cables around sites is a scenic eyesore. Burying cables in the ground by using 11 Kv cables is a possible solution. However it should be noted that excavations of at least 800 m depth require consultation with DOA. Because it takes time, this project cannot be implemented in the short term. Instead further studies for this activity in the implementation plan are necessary.

6.3.3 Action 5: Enhancement of Sustainability as a Tourism Destination

In order to maintain the sustainability of tourist destinations, it is necessary to develop sufficient infrastructure that correspond to the demand of the increasing number of tourists. Therefore, Action 5 will explain about the basic infrastructure as well.

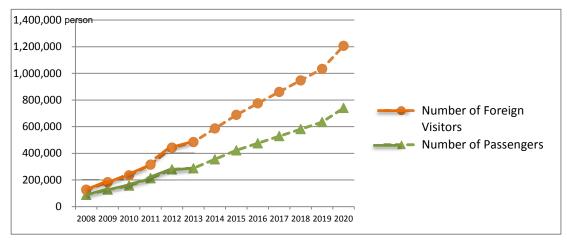
(1) Access Improvement (as basic infrastructure)

1) Airports

Since airport is an important gateway in Bagan, sustainable development, management and maintenance are required.

Based on transition of the number of foreign tourists and airline passengers visiting Bagan have been increasing in the last 5 years, the estimated number of passengers in the future is shown in Figure 6.1. By 2020, the number of passengers is estimated to increase to 800,000 people / year. During the high season in November, the number of passengers can be 120,000 people / month, or 4,000 people / day. Assuming the number of passengers is 100 people per flight, 40 flights / day is required.

Since airport's development and upgrade has been conducted in JICA's other scheme, the current airport capacity is considered possible to handle the short-midterm demand.



Source: JICA Survey Team

Figure 6.1 Growth of Annual Number of Foreign Visitors and Number Passengers on Domestic Flights

Therefore, aiming for 2020 and beyond, it is necessary for this project to consider on how to

correspond to the international flights and the expansion of the airport. In particular, the study on measures for the international direct flights is important, for example the use of a new airport, such as Pakkok Airport, as well as Mandalay Airport. In addition, since there is no refuelling facility in Nyaung-U Airport, the flights' routes are limited. To build refuelling facility, oil distribution system on the ground must be developed prior to that.

2) Port-related facilities

Waterway, as public transportation means to move between cities, is expected to lose importance as means of transportation in the future due to the progress of road constructions and the increasing number of automobiles. However, there is a potential for short-range river transportation for tourism in Bagan.

Therefore, in the short-term, since most of the piers get submerged in water and washed away during rainy season, this project will focus on the development of waiting space and promenade for tourists on the sandy land as well as on the aesthetic improvement of the piers.

Also, in the midterm, since there are conflicts between boat companies and the riverside hotels regarding the location of docks and berth for big ships as explained in Chapter 2, it is necessary to first solve the legal issues, and then in the long-term, proceed to the construction of semi-permanent pier and access development for boarding.

3) Roads

Development has been progressing under the scheme of BUILD-OPERATE-TRANSFER (BOT) method. Therefore in implementation plan where the focus of the improvement study shall be placed in the urban area in Nyaung-U Town, New Bagan Town, as well as the unpaved area in the hotel zones. Also, road traffic including inter-city and inner-city traffic are likely to increase in the future, especially the increase of shipping trucks following the growth of economy. Thus, demand for safety and aesthetic measures, such as truck regulation or bypass development are likely to increase in the future.

4) Bus Terminal

An improvement of bus circulations from bus terminal, inside the archaeological zone, to the hotels in Old Bagan and the study about regulation are considered necessary.

(2) Visitor management (development of tourist flow line)

Because heritage sites are vulnerable products, the importance of sustainable and balanced development of tourism should be stressed. Particularly, there are some reports that tourists go on to rooftops of temples and pagodas, and pressure from this weight on the structures accelerates deterioration of heritages. It is necessary to make a visitor management plan to distribute tourists around multiple sites and to avoid concentration in a single place. This also contributes to safety concerns. Together with distribution of tourists in multiple routes in Action 2 and development of alternative tourism spots in Action 3, it will significantly contribute to mitigating human induced loading.

1) Improvement of Tourists' Circulation

Regarding the tourist circulation, although there are some religious regulations around and inside the heritage sites, there are no specific restrictions on activities; thus the tourists are free to act according to their dispositions. However, there should be some regulated access time schedules required with some restriction on the number of visitors and their circulation during peak hours in peak seasons for sustainability of fragile sites. Thus visitor management is important and required.

2) Safety Improvement

The need to have safety measures for deterioration and fragments falling from the ruins has become essential. These situations also occur when many people go up to the terrace of the temple at once, and reports of people slipping due to broken stairs or a lack of handrails inside the temples, as well as dropping of bricks or plaster as explained in section 2.2.1.

Moreover, as Bagan is located in the central dry zone, the presence of scorpions and poisonous snakes have been confirmed, thus require extra caution when moving around the sites with no street lighting, such as getting into bushes or approaching the heritage sites at night. For this reason, mid-long term plan initiatives need to be studied as implementation plan that encourage caution as well as consideration of the installation of bollard light with solar power.

On the other hand, falling from E-bikes or bicycles while driving as well as traffic accidents such as collision with cars cause concern regarding stock shortage of blood transfusion due to massive bleeding from injury. Even though it is possible to get blood stock from the district hospital (though the precise amount is not clear), it is necessary to integrate the hospitals into the existing blood storage system (Thwe Hlu Shin A Thin: Blood Donation Team) in the local unit in case of emergency.

3) Commercial Activity Control

Commercial activities (tenants and peddlers) within heritage sites are not regulated by any clear criteria. Recognizing the need for further study along with the tourism administration group, the study for carrying capacity in archaeological zone under the formulation of the implementation plan from the sustainability point of view is necessary.

(3) Environment development of heritage sites (as tourism infrastructure)

In this section, rather than to meet the challenges of deterioration of structural ruins itself, it is an initiative to be in the perspective of the visiting tourists and try to solve the environmental problems in the surrounding site without impairing the commercial value of the heritage sites as tourism products. This activity is also an important factor to prevent the deterioration of the ruins itself. In particular, improvement toward garbage and flooding challenges will be discussed further.

1) Waste Treatment

At this point in time, sufficient reclaimed land has been secured. We will study appropriateness and feasibility of the waste treatment capacity and methodology in the implementation planning in consideration of a growing population and tourism. The problem is not caused by foreign tourists but mostly by local tourists and residents. Provision of an awareness campaign for recycling of resources and waste treatment in the first place rather than construction of additional facilities and purchasing collection vehicles is vital.

Meanwhile, there is illegal disposal of waste in some valuable viewing spots, causing an adverse impact on the tourism industry.

Firstly implementing waste removal works at 22 prioritized heritage sites and then new waste treatment sites and regulations on disposal as a permanent measure will be discussed in WG. Downstream, the use of non-degradable plastic bags should be regulated. Also, advocating use of organic bags such as those made of jute, banana leaves, palm leaves and sugarcanes will be encouraged. Compost from collected organic garbage and a recycling system of cans and bottles are also planned.

For Nyaung-U township, developing a waste treatment service and taking the following measures in phases to obtain beautiful scenery and respond to growing volume of waste along with the expanding tourism industry has been undertaken.

< Phased development of waste treatment service (Plan) >

- 1. Dispose collection service on a regular basis, stipulating collection routes and dates.
- 2. Review collection routes and modify unequal distribution of services (reduce use of landfills and individual disposal)
- 3. Monitor the volume of collected waste after reviewing step 1, 2.
- 4. Based on item 3, compare the volume of waste and the capacity of existing public landfill.
- 5. Parallel to item 4, study the necessity and relevance of incineration plants.

Notes on development of incineration plants:

Location / incineration method / number of incinerators to meet demand / design of facility / consideration to environmental impact including anti-pollution measures/management and maintenance capacity.

6. Analogous to the above activities, practice awareness campaigns to local residents.

2) Rainwater drainage treatment

Approaches to temples and shops around heritage sites are frequently waterlogged after rains due to lack of proper rainwater drainages. It needs an urgent countermeasure, otherwise it might submerge the foundation of the ruins and causes mould that might lead to voids to the structure of the foundation, that will have negatively effect on the heritages.

It is recommended that construction and plumping should be regarded as infrastructure development in the implementation plan in the mid-term since construction near heritage sites requires consultation with DOA. The same Action 2 may be applied to neighbourhoods away from the heritage sites.

(4) Development of Basic Infrastructures

When considering the sustainability of Bagan as a tourist spot, one factor that has the biggest impact is the increase of tourists. Thus the development of mid-long term infrastructure that can correspond to the increase of tourists is necessary.

1) Clean water treatment facilities

Below is the water supply capacity verification of the two pumping stations in Nyaung-U Township where water is currently being supplied. According to the Table 6.3, following the natural increase of the population since the increase of demand following the natural increase of the population is expected, there is almost no change in the percentage, which is about 4.3% of the entire water supply demand due to the increase of tourist arrivals, and assumed to stay the same even in 2020.

On the other hand, the region has been collecting water from Irrawaddy River as a water source, with no quantitative problems. However, during dry season the lifting height has been increasing year after year; thus it is important to generally increase the water supply capacity to correspond to the future demand and environmental changes, such as by increasing the pumping capacity, adding more water tanks and sedimentation basins, laying water supply pipes, or by reducing the percentage of non-revenue earning water.

It is necessary to enable water provision that is commensurate with the WHO water quality standard in the future considering there is no disinfection facility at present.

Table 6.3 Verification of Water Supply Capacity

Item Unit 2014 2015 2016 2017 2018

| Item | Unit | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---------------------------|---------------------|---------|---------|---------|---------|---------|---------|---------|
| Population | Person | 242,000 | 243,200 | 244,400 | 245,600 | 246,800 | 248,000 | 249,200 |
| Water supply rate*1 | % | 90 | 92 | 94 | 96 | 98 | 100 | 100 |
| Water supplied population | Person | 217,800 | 223,744 | 229,736 | 235,776 | 241,864 | 248,000 | 249,200 |
| Water demand unit *2 | L/c/day | 20.00 | 26.67 | 33.33 | 40.00 | 46.67 | 53.33 | 60.00 |
| Water demand | m3/day | 4,356 | 5,967 | 7,658 | 9,431 | 11,287 | 13,227 | 14,952 |
| | | | | | | | | |
| Water supply unit *3 | L/c/day | 20 | 20 | 20 | 15 | 15 | 15 | 15 |
| Water supply | m ³ /day | 5,445 | 7,458 | 9,572 | 11,095 | 13,279 | 15,561 | 17,591 |
| | | | | | | | | |
| Water supply for Touris | sm | | | | | | | |
| Tourists*4 | Person | 3,201 | 3,735 | 4,184 | 4,689 | 5,251 | 5,883 | 6,543 |
| Basic unit*5 | L/c/day | 90 | 95 | 100 | 105 | 110 | 115 | 120 |
| Water supply | m ³ /day | 288 | 355 | 418 | 492 | 578 | 677 | 785 |
| Percentage *6 | % | 360 | 443 | 523 | 579 | 680 | 796 | 924 |
| | | | | | | | | |

| Item | Unit | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--------------------------------|---------------------|-------|-------|--------|--------|--------|--------|--------|
| Results of water supply | planning | | | | | | | |
| Required water supply capacity | m ³ /day | 5,900 | 8,000 | 10,100 | 11,700 | 14,000 | 16,400 | 18,600 |
| Required water tank capacity | m ³ | 1,500 | 2,000 | 2,600 | 3,500 | 4,100 | 4,800 | 5,500 |
| Required water storage time | hr | 6 | 6 | 6 | 6 | 7 | 7 | 7 |
| | | | | | | | | |
| Existing water tank capacity | m ³ | 4,319 | 4,319 | 4,319 | 4,319 | 4,319 | 4,319 | 4,319 |

Source: JICA Survey Team

Note:*1:2014 is based on record, set to increase by 2% per year.

- *2:2014 is based on record, then, set to increase with economic growth (3 times in 2020).
- *3:2014 is based on record, then decrease to 15% because of improvement.
- *4:Daily tourist number in high season (November). 2014 is based on records, the rest is assumption.
- *5:In 2014 is calculated as 20 gallons/day based on interviews.

2) Sewage treatment facilities

The population of the Township in 2014 is 242,000 and the assumed 2020 population will be 249,200, in comparison with the data acquired from interviews: the planned basic unit of sewage is set as 80% of the water supply. The study results showing required capacity for sewage treatment is as follows.

Table 6.4 Study Results of Sewage Treatment Capacity

| | 1 | ı | | | | | | | |
|----------------------------|------------------|---------|---------|---------|---------|---------|---------|---------|--|
| Item | Unit | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | |
| Daily life water | Daily life water | | | | | | | | |
| Population | Person | 242,000 | 243,200 | 244,400 | 245,600 | 246,800 | 248,000 | 249,200 | |
| Sewage incidence | % | 80 | 80 | 80 | 80 | 80 | 80 | 80 | |
| Sewage discharge | m3/day | 4,356 | 5,967 | 7,658 | 8,876 | 10,623 | 12,449 | 14,072 | |
| Water for Tourism | | | | | | | | | |
| Tourists*1 | Person | 3,201 | 3,735 | 4,184 | 4,689 | 5,251 | 5,883 | 6,543 | |
| Sewage incidence | % | 80 | 80 | 80 | 80 | 80 | 80 | 80 | |
| Sewage discharge | m3/day | 288 | 355 | 418 | 463 | 544 | 637 | 739 | |
| Percentage *2 | % | 6.2 | 5.6 | 5.2 | 5.0 | 4.9 | 4.9 | 5.0 | |
| Results of sewage planning | | | | | | | | | |
| Required sewage capacity | m3/day | 4,644 | 6,321 | 8,076 | 9,340 | 11,167 | 13,085 | 14,811 | |

Note:*1:Daily tourist number in high season (Nov.) 2014 is based on record, the rest is based on the assumed tourists number until 2020

*2:Sewage discharge/ required sewage

Source: JICA Survey Team

In the mid-long term, just like in Nyaung-U Town and New Bagan Town, if the site for sewage treatment facility can be secured for each treatment area, it will enable the collecting and processing to be combined with the neighbouring areas. However, considering the fact that the number of tourists has increased in a short period of time, hotels having their own septic tank which follow international standards as treatment facilities are considered ideal for the time being. But it is also important to create a new corresponding system.

^{*6:}Water supply for tourism/ required water supply capacity.

3) Electricity

The following table shows the required electricity capacity and the current in Nyaung-U Township (excluding the 66 villages with no electricity).

Table 6.5 Current Electricity Capacity and its Demand

| 1. | Conditions | | |
|----|---|-------|--------------|
| | Number of household (urban area) | house | 11,000 |
| | Number of household (rural area) | house | 2,000 |
| | Unit (urban area) | W | 1,500 |
| | Unit (rural area) | W | 800 |
| | Power usage (performance based, Nyaung-U and Old Bagan) | MW | 5.5 |
| | Power usage (performance based, New Bagan) | MW | 2.5 |
| 2. | Electricity demand | | |
| | 1,500w x 11,000 (urban area)···A | MW | 16.5 |
| | 800w x 2,000(rural area)⋯B | MW | 1.6 |
| | A+B | MWh | 18.1 |
| 3. | Transformer capacity | | |
| | Operating transformer | - | 66/11kV/5MVA |
| | Number of transformers | unit | 3 |
| | Each capacity | - | 5MVA=4MW |
| | Total capacity | MW | 12 |

Source: JICA Survey Team

Based on the above table, the capacity of the substation (12 MW) exceeds the actual value of power usage (8.0 MW); although it is assumed to still be able to cope with two substations operating during normal time, it will be insufficient for the demand of electricity during peak season which will lead to frequent power failures and rolling blackouts. Furthermore, the demand rate calculated from actual power usage and the demand during peak time is 44.2%, a seemingly reasonable value. However, when observing the current situation and considering the increase of power demand from the construction of large hotels in the same region in the future, it will be necessary to review the setting and design condition during peak times and to consider adding more substation facilities over the mid-to long-term.

4) ICT facilities

In order to ensure emergency contact and tourist safety, cooperation with the Tourist Police (an alternating system of Police Box "Koban") is required, while simultaneously considering improvement measures.

Although there are some issues on the quality of connection line, it is not a major disincentive for tourism development as the target of this project. It is worth supporting the current development by the Myanmar government of placing priority to the beauty of the heritage site into consideration then preserving the landscape of historical areas.

5) Waste-related facilities

Although the area for landfill still meets the present demand, the fact that garbage collection frequency, garbage classification, and the routes (collection point) are not clearly defined, and that understanding of hygiene is sparse in the first place, makes it important to start with developing a system and awareness promotion activities at the outset. It is necessary to first address the issues at WG regarding tourist circulation and illegal dumping around the temples and pagodas, as well as restriction on using plastic bags.

6.4 Implementation Process for Development of Tourism Infrastructure in Bagan

Based on the needs for development of tourism infrastructure studied in section 6.3 the following procedure will be rendered:

6.4.1 Establishment of an Infrastructure Development Promotion Committee for Regional Tourism

One of the important criteria in implementation of the pilot project would be capacity development of public and private stakeholders involved in tourism infrastructure development. To this end, it is expedient to propose establishing a committee to discuss issues regarding local tourism infrastructure development. This committee can be a sub-organization of Bagan's tourism management organization. Working Group 2 (WG-2) organized for JICA project implementation is a starting point for the committee.

6.4.2 Implementation of Tourism Infrastructure Development Baseline Survey

Tourism infrastructure development promotion committee (WG-2) will implement the following surveys to understand the current development status of local tourism infrastructure. Those surveys will serve as baseline for monitoring and assessment of pilot projects as well as formulating an implementation plan.

- 1) Survey on FIT tourists behaviour pattern
- 2) Survey on tourism spots (current status and potential) recognized by local residents
- 3) Survey on issues and relationship among tourists behaviours, tourism spots and tourism infrastructure

| Survey title: | [1] Survey on FIT tourists behaviour pattern |
|----------------|--|
| Target area: | Bagan heritage zone, Nyaung-U town and New Bagan town. |
| Survey items: | Background information (routes, destination, time required, place of accommodation, number of tourists) Type of tourists (Domestic or foreigner, in group or FIT, nationality, etc) Issues in tourism infrastructure development (regulation by MOC, consideration for environment and society) Issues in maintenance and management (cost and human resources) Issues in organizational structure (recruitment, supply source, job category, scale) Others |
| Methodology: | Based on the result of questionnaire survey, the study team conducts an interview survey (incl. tour guides), OD survey |
| Survey Period: | Launched within a month after project started, report the results within two |

months

| | 1110111110 | | |
|----------------|--|--|--|
| | , | | |
| Survey title: | [2] Survey on tourism spots (current status and potential) recognized by local residents | | |
| | | | |
| Target area: | Bagan heritage zone, Nyaung-U town and New Bagan town. | | |
| Survey items: | Background information (routes, destination, time required, place of | | |
| | accommodation, number of tourists) | | |
| | Issues in tourism infrastructure development (regulation by MOC, consideration | | |
| | for environment and society) | | |
| | Issues in maintenance and management (cost and human resources) | | |
| | Issues in organizational structure (recruitment, supply source, job category, | | |
| | scale),etc. | | |
| Methodology: | Based on the result of questionnaire survey, the study team conducts an | | |
| | interview survey (incl. tour guides) | | |
| Survey Period: | Launch within a month after project started, report the results within two | | |
| | months | | |
| | • | | |

| Survey title: | [3] Survey on issues and relationship among tourists behaviours, tourism spots and tourism infrastructure | |
|----------------|--|--|
| Target area: | Bagan heritage zone, Nyaung-U town and New Bagan town. | |
| Survey items: | Insufficient tourism Infrastructure Insufficient tourism information Obscure tourism spots Obscure tourism information Issues in tourism infrastructure development (regulation by MOC, consideration for environment and society) Issues in maintenance and management (cost and human resources) Issues in organizational structure (recruitment, supply source, job category, scale) Others | |
| Methodology: | Discuss in WG based on the results of above three surveys. | |
| Survey Period: | Launch within two months after project started, report the results within a month | |

In consideration of technology transfer and sustainability, it is recommended that surveys be conducted mainly by members from tourism infrastructure promotion committee (WG-2) while employing guides and local experts as assistants for the JICA Expert Team.

6.4.3 Formulating of an Implementation Plan

The JICA Expert Team in collaboration with the infrastructure development promotion committee create an implementation plan for tourism infrastructure development in Bagan by the target year of 2020 based on the results of above surveys as well as the tourism infrastructure vision. (see more detail in section 6.5)

6.4.4 Implementation of Pilot Projects

MoHT and JICA will select pilot projects to be implemented. JICA Expert Team in collaboration with WG2 then creates a detailed implementation plan for selected projects. Pilot projects are led by the human resource development promotion committee. (see more detail in 6.6)

6.4.5 Monitoring and Feedback from Pilot Projects

WG2 monitors the progress of development on a quarterly basis.

Monitoring is conducted throughout the project period and the infrastructure development projects are reviewed and revised based on the results. Through the work cycle, finalize the model of the tourism infrastructure development plan and modify and improve the quality of the implementation plan.

6.4.6 Execution of the Implementation Plan

Realization of the Implementation plan is led by WG2.

6.5 Implementation Plan

6.5.1 Important points to be considered for the formulation of Implementation Plan

The purposes of the implementation plan for infrastructure development are to develop and improve the quality of infrastructure and continually meet the growing demand for infrastructure proposed in the Bagan tourism development strategy in Chapter 4. The implementation plan will be created with the following five points in mind based on the baseline survey in section 6.4.2.

- 1. Mid and long term measures consistent with demand outlook for basic infrastructure.
- 2. Policy regarding development of basic infrastructures (incl. guidelines and institution).
- 3. Mid and long term measures for development of tourism infrastructure.
- 4. Capacity development of tourism administration, related public bodies and relevant institutions.
- 5. Securing autonomy and sustainability of the tourism infrastructure promotion committee as well as tourism infrastructure projects led by them.

6.5.2 Formulation Plan for Implementation Plan

(1) Expected outcome

Expected outcomes are formulation of an infrastructure development programme in Bagan and its corresponding implementation plan.

(2) Working items

Work to be done during implementation is as follows:

- Identify the current status of tourism infrastructure in Bagan based on the results of baseline survey.
- Set a target year and demand outlook in line with the Bagan tourism development strategy.
- Create infrastructure development programs.
- Create implementation plans (finance scheme and organizational structure) for the infrastructure development programs.

- Implement pilot projects based on the organizational structure and the finance scheme proposed in the implementation plan.
- Review and revise the infrastructure development program based on the results of monitoring of pilot projects.

(3) Organizational structure

Stakeholders in implementation plan and their roles are show below:

| Organization | Role | | |
|--------------------|--|--|--|
| | Decision making by JCC | | |
| MoHT | Serve as counterparts | | |
| | Participation in planning process of implementation plan | | |
| MoHT Ragan | Participate in WG2 | | |
| MoHT Bagan | Serve as counter parts | | |
| | Assist in management of tourism infrastructure development committee | | |
| WG2 | Comment on implementation plan | | |
| | Monitor implementation of pilot projects | | |
| | undertake the implementation plan | | |
| | Assist in management of WG2 | | |
| JICA Expert Team | Forster implementation | | |
| JICA Expert Tealif | Technological assistance of pilot projects | | |
| | Review an revision of implementation plans | | |

(4) Inputs by JICA

Experts are needed to implement pilot projects and for formulating the following aspects of the implementation plan:

- Tourism infrastructure development planning 1: general affairs on an infrastructure development plan including implementation (Landscape architect)
- Tourism infrastructure development planning 2: general affairs on an infrastructure development plan including implementation (Architect)
- Execution scheme and estimation for infrastructure development implementation
- Management and maintenance of infrastructure
- Environment and social consideration experts
- Local subcontracting (about 1.5 months) 5,000 USD
- Period: from the time of obtaining permission on the project to the time of design completion

A pool of experts should be prepared to give technical advice as need arises. Experts in the following fields are particularly needed: design (electricity / machinery), structure (architect / civil engineering), ICT, supervision on planning, design and construction of the port, airport and sewerage treatment facility.

(5) Subcontracting survey

- · Soil survey: Underground exploration of TIC, to confirm specification of cycling roads
- Topographic survey: topographic survey on TIC, cycling roads and plazas
- OD survey: survey on tourist routes around heritage sites, and incoming and outgoing traffic to/from Bagan
- Archaeological excavation survey: this will be done at the time of excavation for basic foundations (if necessary).
- · Water quality survey: river, well (shallow and deep), clean water, sedimentation ponds
- · Hydrologic survey: Water catchment, water reservoirs and water logging areas
- Environmental and social study

Terms of Reference (TOR) for the above mentioned surveys which will be subcontracted to the local consultants and contractors are shown below:

| Survey title: | 1 - 1 Soil Survey (TIC) | | |
|---------------|---|---|--|
| Target area: | The project site is located at the existing TIC site in New Bagan, Nyaung-U | | |
| | Township, Mandalay Region. | | |
| Survey items: | The following works shall be conducted at the site. | | |
| | 1) Core Boring by using rotary drill of 66 | 6 mm dia. | |
| | 2) Standard Penetration Tests (N-Values) | | |
| | 3) Sampling for laboratory test specimen | | |
| | All investigations and tests shall be performed in accordance with relevant | | |
| | Japan Industrial Standard, ASTM or BS Standards. | | |
| Methodology: | Two (2) boreholes for the proposed project site shall be drilled within the site Drilling depths shall be 10 m from the ground surface. Ground water level sh be surveyed for each hole. If some obstacles which improperly effect on N-Values (for example rocks, concrete debris, ruins, etc.) - are found within a depth of 10 m, then other boreholes shall be drilled to the bearing stratum. | | |
| | | | |
| | On-Site permeability test shall be conducted by using each hole. | | |
| | After drilling the first borehole and Standard penetration test (S.P.T), following information shall be noticed to JICA Survey Team. - N-Values - Conditions of soils (sand, clayetc.) | | |
| | | | |
| | | | |
| | Undisturbed samples shall be obtained from each stratum. Thin-wall samplers or other approved sampling device shall be used for sampling. | | |
| | Samples shall be tested at an approved laboratory for the following: | | |
| | Physical dynamics examination (4samples) | Material examination (4samples) | |
| | Grain Size Distribution | Grain Size Distribution | |
| | Apparent specific Gravity | Natural Moisture Content | |
| | Density | Unconfined compression | |
| | Natural Moisture Content | strength | |
| | - Shear tests | PH measurement Test | |
| | Liquid limit test | Determination of Chloride and | |

| | Specific Gravity One-dimensional consolidation Test | Sulphate |
|------------------------|---|---|
| Deliverables: | A soil investigation report containing the description of the investigation, borehole logs together with N-values, and results of the on-site and laboratory tests shall be compiled. Conclusion and recommendation of each test are to be described on the report. | |
| | An original and five (5) copies of the report shall be submitted together with one (1) electronic file and the photos taken during the site works. | |
| Implementation Period: | Commencement after the starting of pilo output within two months. | ot project within one month and provide |

| Survey title: | 1 - 2 Soil survey (Cycling road) | | |
|------------------------|--|---|--|
| Target area: | Near the approach road to monuments in Archaeological Zone. | | |
| Survey items: | In order to determine the specification and materials of pavement for cycling road, the original pavement material will be identified by making boring test. | | |
| Methodology: | y: Two (2) boreholes for the proposed project site shall be drilled within the site. Drilling depths shall be 5 m from the ground surface. Ground water level shall be surveyed for each hole. The following information shall be noticed to JICA Survey Team. - Conditions of soils (sand, clayetc.) Undisturbed samples shall be obtained from each stratum. Thin-wall samplers or other approved sampling device shall be used for sampling. Samples shall be tested at an approved laboratory for the following: | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | Physical dynamics examination (4 samples) | Material examination (4 samples) | |
| Deliverships | Grain Size Distribution Apparent specific Gravity Density Natural Moisture Content Shear tests Liquid limit test Specific Gravity One-dimensional consolidation Test | Grain Size Distribution Natural Moisture Content Unconfined compression strength PH measurement Test Determination of Chloride and Sulphate | |
| Deliverables: | A soil investigation report containing the description of the investigation, borehole logs and results of the on-site and laboratory tests shall be compiled. Conclusion and recommendation of each test are to be described on the report. An original and five (5) copies of the report shall be submitted together with one (1) electronic file and the photos taken during the site works. | | |
| Implementation Period: | Commencement after the starting of pilot project within one month and provide output within two months. | | |

| Survey items: Area for the survey will measure approximately 25,600 ft2 inside the compound above mentioned and adjoining roads and space for reference. Boundary survey and topographic survey shall be done including the proposed site and its surrounding. Boundary marker shall be installed at the corner of boundary where the corner monument is not installed. Methodology: The traverse for survey of base points shall be a closed traverse, and one of the base points shall be an existing bench mark established by the local authority of jurisdiction. If there is no available existing bench mark in the area, at least two bench marks of concrete shall be established and protected. The existing main road levels surrounded the site shall be surveyed at 10 m intervals. Topographic survey consisting of triangulation survey for base point and plane table survey for detailed topography shall cover all of the existing structures/building, existing trees with the trunk of more than 5 cm dia. and other features. Topographic survey shall cover the perimeter of the site area. New facilities are to be constructed in the site, therefore features of the position of existing buildings shall be indicated by plans and elevations on the separate sheet. Unless otherwise agreed in advance, accuracy of the surveys shall be as follows: The accuracy of levelling in terms of closure error for a round trip shall be 20 mm√S Where, S = survey distance of one way in km. The existing ground levels of the entire site shall be surveyed at intersections of | Survey title: | 2 - 1 Topographic survey (TIC) |
|--|---------------|---|
| Area for the survey will measure approximately 25,600 ft2 inside the compound above mentioned and adjoining roads and space for reference. Boundary survey and topographic survey shall be done including the proposed site and its surrounding. Boundary marker shall be installed at the corner of boundary where the corner monument is not installed. Methodology: The traverse for survey of base points shall be a closed traverse, and one of the base points shall be an existing bench mark established by the local authority of jurisdiction. If there is no available existing bench mark in the area, at least two bench marks of concrete shall be established and protected. The existing main road levels surrounded the site shall be surveyed at 10 m intervals. Topographic survey consisting of triangulation survey for base point and plane table survey for detailed topography shall cover all of the existing structures/building, existing trees with the trunk of more than 5 cm dia. and other features. Topographic survey shall cover the perimeter of the site area. New facilities are to be constructed in the site, therefore features of the position of existing buildings shall be indicated by plans and elevations on the separate sheet. Unless otherwise agreed in advance, accuracy of the surveys shall be as follows: The accuracy of levelling in terms of closure error for a round trip shall be 20 mm/\$ Where, \$ = survey distance of one way in km. The existing ground levels of the entire site shall be surveyed at intersections of grids of 10 m intervals in both directions. Contour lines at 0.25 m in elevation of the existing ground level shall be indicated by a dash line and contour lines at 1 m in elevation of the existing ground level shall be indicated by a dash line and contour lines at 1 m in elevation of the existing ground level shall be indicated by a dash line and contour lines at 1 m in elevation of the existing pround level shall be indicated by a dash line and contour lines at 1 m in elevation of the existing point l | Target area: | The project site is located at the existing TIC site and surrounding roads in New |
| above mentioned and adjoining roads and space for reference. Boundary survey and topographic survey shall be done including the proposed site and its surrounding. Boundary marker shall be installed at the corner of boundary where the corner monument is not installed. Methodology: The traverse for survey of base points shall be a closed traverse, and one of the base points shall be an existing bench mark established by the local authority of jurisdiction. If there is no available existing bench mark in the area, at least two bench marks of concrete shall be established and protected. The existing main road levels surrounded the site shall be surveyed at 10 m intervals. Topographic survey consisting of triangulation survey for base point and plane table survey for detailed topography shall cover all of the existing structures/building, existing trees with the trunk of more than 5 cm dia. and other features. Topographic survey shall cover the perimeter of the site area. New facilities are to be constructed in the site, therefore features of the position of existing buildings shall be indicated by plans and elevations on the separate sheet. Unless otherwise agreed in advance, accuracy of the surveys shall be as follows: The accuracy of levelling in terms of closure error for a round trip shall be 20 mm√S Where, S = survey distance of one way in km. The existing ground levels of the entire site shall be surveyed at intersections of grids of 10 m intervals in both directions. Contour lines at 0.25 m in elevation of the existing ground level shall be indicated by a dash line and contour lines at 1m in elevation of the existing ground level shall be indicated by a dash line and contour lines at 1m in elevation of the existing ground level shall be indicated by a solid line on the topographic map. Inked topographic map and longitudinal/cross section maps (drawings) with the scale of 1/500 shall be prepared. The sheet for the map shall be a paper. The map shall show the base points, location of structures and o | | Bagan, Nyaung-U Township, Mandalay Region. |
| Boundary survey and topographic survey shall be done including the proposed site and its surrounding. Boundary marker shall be installed at the corner of boundary where the corner monument is not installed. Methodology: The traverse for survey of base points shall be a closed traverse, and one of the base points shall be an existing bench mark established by the local authority of jurisdiction. If there is no available existing bench mark in the area, at least two bench marks of concrete shall be established and protected. The existing main road levels surrounded the site shall be surveyed at 10 m intervals. Topographic survey consisting of triangulation survey for base point and plane table survey for detailed topography shall cover all of the existing structures/building, existing trees with the trunk of more than 5 cm dia. and other features. Topographic survey shall cover the perimeter of the site area. New facilities are to be constructed in the site, therefore features of the position of existing buildings shall be indicated by plans and elevations on the separate sheet. Unless otherwise agreed in advance, accuracy of the surveys shall be as follows: The accuracy of levelling in terms of closure error for a round trip shall be 20 mm/S Where, S = survey distance of one way in km. The existing ground levels of the entire site shall be surveyed at intersections of grids of 10 m intervals in both directions. Contour lines at 0.25 m in elevation of the existing ground level shall be indicated by a solid line on the topographic map. Deliverables: Inked topographic map. Inked topographic map and longitudinal/cross section maps (drawings) with the scale of 1/500 shall be prepared. The sheet for the map shall be a paper. The map shall show the base points, location of structures and other topographic features. Contour line for five meter and ten meter shall be emphasized by using the different type of line. An inked plan of the existing building of appropriate scale shall be prepared, which shall cover | Survey items: | |
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| • | | (1) electric file of the maps prepared by CAD system which is compatible to the |
| | • | · · · · · · · · · · · · · · · · · · · |

| Survey title: | 2 - 2 Topographic survey (Cycling road) |
|------------------------|--|
| Ourvey une. | 2 - 2 Topographic Survey (Cycling Toad) |
| Target area: | The project site is located in the selected area of proposed cycling road within Archaeological Zone, Nyaung-U Township, Mandalay Region. |
| Survey items: | Area for the survey will measure approximately 3.219 linear km (2 mi) and 10 m (33 ft) wide of above mentioned proposed cycling road and adjoining trees and structures for reference. |
| | Boundary survey and topographic survey shall be done including the proposed road and its surrounding. Boundary marker shall be installed at the corner of junction with the arterial roads where the corner monument is not installed. |
| Methodology: | |
| | The traverse for survey of base points shall be a closed traverse, and one of the base points shall be an existing bench mark established by the local authority of jurisdiction. If there is no available existing bench mark in the area, at least two bench marks of concrete shall be established and protected. |
| | The existing main road levels crossed with the proposed cycling road shall be surveyed up to 10 m on both sides of the road. |
| | Topographic survey consisting of triangulation survey for base point and plane table survey for detailed topography shall cover all of the existing structures/building, existing trees with the trunk of more than 10 cm dia. and other features. Topographic survey shall cover the perimeter of the proposed cycling road as well. |
| | The existing ground levels of the entire proposed cycling road shall be surveyed at intersections of grids of 10 m intervals in both directions. Contour lines at 0.25 m in elevation of the existing ground level shall be indicated by a dash line and contour lines at 1 m in elevation of the existing ground level shall be indicated by a solid line on the topographic map. |
| | In case new facilities or signage established are to be constructed along the proposed cycling road, the features of the position of proposed facilities and signage shall be indicated by plans and elevations on the separate sheet. |
| | The accuracy of levelling in terms of closure error for a round trip shall be 20 mm \sqrt{S} Where, S = survey distance of one way in km. |
| Deliverables: | Inked topographic map and longitudinal/cross section maps (drawings) with the scale of 1/1000 shall be prepared in horizontal and 1/200 shall be prepared in vertical. The sheet for the map shall be a paper. The map shall show the base points, location of structures and other topographic features. Contour line for 5 m and 10 m shall be emphasized by using a different type of line. |
| | An inked plan of the existing building of appropriate scale shall be prepared along the proposed cycling road, which shall cover the features of the existing building. |
| | Survey report containing field notes, calculation sheets and photographs during the survey works, etc. shall be submitted together with the above maps. |
| | Original and five (5) copies of the above shall be submitted together with one (1) electronic file of the maps prepared by CAD system which is compatible to the AUTO-CAD System. |
| Implementation Period: | Commencement after the starting of pilot project within one month and provide output within two months. |

| Survey title: | 3 - 1 Traffic | survey | | | | | | |
|---------------|---|--|--------------------------|-------------------|--|--|---------------------------|-----------------------------------|
| Target area: | passengers required to Monument | r of vehicles, motorbike and specification of too understand the present Zone and present parki otained from the Traffic | urist I traff ng d | bus ic v em | s parking l volume or and on th | ot and the access ro e tourist b | acces bad to us pai | ss roads are Ancient rking. |
| Survey items: | tourist flow | around car parking, mu ling future developmen | seur | n a | nd monur | ments, as v | well a | s . |
| | with the inc | ed data shall be used to rease of tourist. Travel tant information for form | dema | anc | d shall be | predicted | which | offers the |
| Methodology: | a) Survey | Locations | | | | | | |
| | The approx | imate survey locations | are c | give | en in Table | e 1. | | |
| | • | nger count survey shall s terminal before entre | | | | • | • . | - |
| | should be r | n order to calculate the ecorded for arrival time the monuments. | | | | | | |
| | Location No | Survey Location | | | Classified Vehicle Count Survey | Calcula the sta | | Bus Passenger Count Survey |
| | Location 1 | Roadside of the access roathe Nay Pyi Taw (See Figu | re 1) | | 14 hours | | | |
| | Location 2 | Roadside of the access roa Mandalay (See Figure 1) | ia iron | n | | | | / |
| | Location 3 | Parking lot adjacent to the monuments (See Fig | jure 1) |) | 14 hours | 14 hou | rs | |
| | Location 4 | New Bus Terminal (See Figure 1) | | | 14 hours | | | 14 hours |
| | b) Vehicle Type to be surveyed The types of vehicles for this survey are classified into the following 10 categories: | | | | | 10 | | |
| | Type 1 | Bicycle | | Ту | ype 6 | Minibus (24 | 4 passe | engers) |
| | Type 2 | E-Bike Type 7 BM Bus (Medium) log (26 to 35 passengers) | | | | | | |
| | Type 3 | Motorbike Type 8 | | | | | Public Bus | |
| | Type 4 | 4 Private Car and Type 9 Tourist Bus (Expre | | | | ess Bus) | | |
| | Type 5 | Light Truck with passengers | | <u>T</u> y | ype 10_ | Lorry (2 ax | les, 6 w | rheels) or |
| | Sunday and | ied vehicle count surve d Monday. The survey s n four survey points (So | shall | be | conducte | | | |

| | c) Stay time survey In addition, surveyors also check the license plate of vehicles going through the entrance of the parking place adjacent to the monuments. This data shall be used to estimate the parking demand every hour in the parking lot. |
|----------------|--|
| Deliverables: | The Sub-Consultant shall submit the reports containing the results of the survey to the Consultant. The report shall be written in English. The Report shall include working records of the survey as well as any problems encountered. The Sub-Consultant shall incorporate the comments from the Consultant into the final report to complete it. The Sub-Consultant shall submit the final report in hard copies and soft copies as specified in the service agreement. |
| Implementation | Commencement after the starting of pilot project within one month and provide |
| Period: | output within two months. |

| Survey title: | 4 - 1 Water quality analysis |
|---------------|---|
| Target area: | Water Quality Analysis at Nyaung-U Township and District in the Mandalay |
| | Region. |
| Survey items: | The number of water testing locations, type of sampling water and specification of physical and chemical analysis are required to understand the present water quality supplied in Bagan. |
| | The data obtained from the water quality analysis is utilised to plan an optimum future development direction of water supply in Bagan. The collected data shall be used to analyse the necessary counter measures to improve the water quality and/or suggesting the local community to discard the usage. |

Methodology: **Survey Locations** Survey locations should be taken at the following locations: Location Survey Number of Remarks Location locations No Distance and height difference between Location 1 River 4 pump station and river water. Location 2 Deep Well 50 Depth, diameter and quantity Shallow Well 50 Location 3 Depth, diameter and quantity Quantity (retainable volume) Location 4 Reservoir 4 Location 5 Settling basin 4 Quantity (retainable volume) Location 6 Water tap 50 Water pressure b) Survey parameters Necessary parameters of water quality analysis are shown in Table 1. Table 1 WHO'standerd Mint / Bernarks Faranwin Swhidty NTU Calque 15 TOU Destrical Conductivity ad/em Total Hardrens (As Ca Coll) mg/i Total Dissolved Solid Assalinery (pHII.8) mg/l mg/l Fam (Fe) R 0.3 **mg/** Mangapete (Mn) D.I. =g/210 Sodium (Na) 11 Onlorde 200 13/ 250 mg/i 12 Calicium (Ca) 13 Silica (SiO2) mg/s mg/l 14 retrate (as NO3-) 50 Lacket mg/l 15 retrite (as NO2-) 3 (acuse). 19/ 16 Ammonia (1814+) 17 Arsenic (As) High. 0.01 ms/l TR Flueride 1.5 mg/i 19 Inud 0.01 =g/120 Zinc mg/i Z1 Copper mg/L 22 Eadmium 23 Chrismium 0.001 Hg/l 0.05 mg/s 24 Cyanide 0.07 Hg/l 25 Mercury (total) COOL ma/i 26 0.01 my/ 800 27 -tg/l 28 000 =g/LMust not be detectable in in emy 100-e 29 Total-suiform drinking water sample in any 100-30. Feecal coliform sample 31 Sulphone 250 mg/l 32 Magnesium Deliverables: An original and five (5) copies of the report shall be submitted together with one (1) electronic file and the photos taken during the site works. The report should include raw data, field photos, timesheet and issues during survey. Final report after the reflection of comments on the progress report made by the Implementation Commencement after the starting of pilot project within one month and provide

In parallel to the above water quality analysis, the following hydrologic survey should be conducted.

output within two months.

Period:

| Survey title: | 4 - 1 Hydrologic Survey | | | |
|----------------|--|--|--|--|
| Target area: | Nyaung-U District, Mandalay Region. | | | |
| Survey items: | Basic Data: | | | |
| | Monthly Rain Fall / river water quantity and level (Annual changes) / well | | | |
| | registration book / Topographic map / soil investigation report. | | | |
| | Surface water survey: | | | |
| | Quality of river water / reservoir and field investigation. | | | |
| | Groundwater survey: | | | |
| | 1) Existing deep and shallow well (depth, water level, diameter, daily | | | |
| | consumption: 50~100wells, | | | |
| | 2) Water quality analysis: implemented by Sub-consultant. | | | |
| | Reservoir and water channel survey: | | | |
| | Location and size of catchment and size of each reservoir will be clarified by the topographic map and satellite photos. | | | |
| | Outflow coefficient will be adjusted by the area of agricultural usage. Reservoir | | | |
| | and water channel necessary to renovate will be studied based on the amount | | | |
| | of inflow and outflow, evaporation ratio and penetration ratio and will be used for | | | |
| | the planning of future usage. | | | |
| Methodology: | Field survey and domestic analysis by an expert and water quality analysis by a | | | |
| | Sub-contractor. | | | |
| Implementation | Commencement after the starting of pilot project within one month and provide | | | |
| Period: | output within two months. | | | |

(6) Local staff

Local staff should be hired as interpreters and assistants for Japanese experts above.

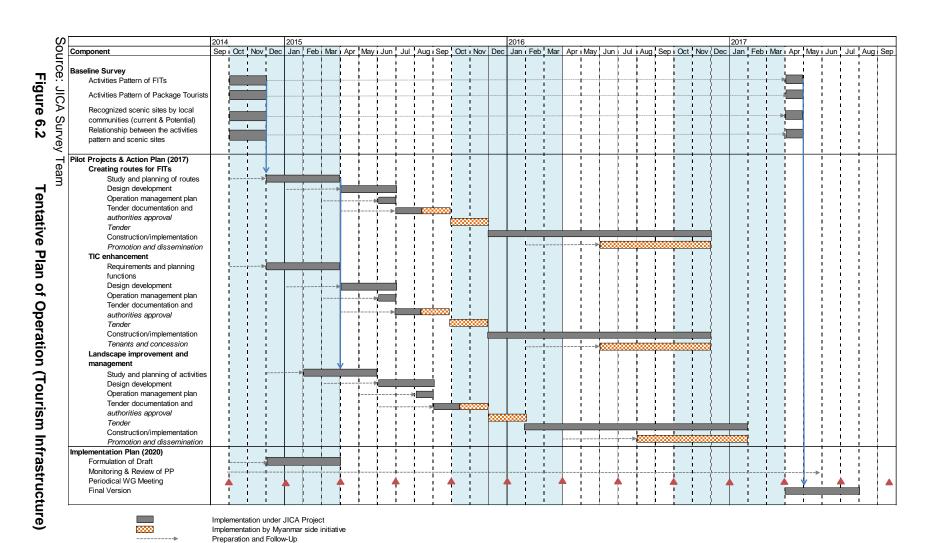
(7) Implementing schedule

Devise an implementation plan in the first year.

- · Expected period: 6 months
- Process of approval by MoHT: 3 months

Monitoring results of pilot projects will be reviewed in the third year and revised as necessary

Modified period: 3 months



Tourism High Season (from October to March)

6.6 Pilot Projects

6.6.1 Objectives of Pilot Projects

There are four purposes of the pilot projects:

- To secure the quality of infrastructure development projects to meet the market demand.
- To develop capacity of the infrastructure development promotion committee.
- To create financially feasible as well as sustainable business models that the infrastructure development promotion committee can handle on its own through pilot projects.
- To identify issues in the implementation plan and reflect these into a more feasible plan.

6.6.2 Long List of Pilot Projects

The following development of tourism infrastructure for Actions 2, 3 and 5 are considered essential:

| Action | Tourism infrastructures |
|---|--|
| Action 1: Tourism promotion for increasing FITs and tourists during the off season | - |
| Action 2:Improvement of local accessibility to freely approach tourism products | Development of cycling road in Bagan Development of heritage tour routes Development of car and bicycle parking Development of green shades in heritage sites Direction and regulation signage Sand dust control Provision of resting facilities Renewal of tourist information center (TIC) Provision of training spaces/meeting rooms Provision of tourism signboard |
| Action 3:Improvement of value and satisfaction of tourism products | Development of application for explanation of tourism site Improvement of museum exhibition Provision of mini-theatre at TIC Development of new observation site for sunset and sunrise. Improvement of landscape and scenery Improvement of soft landscape by weeding and pruning Improvement of long-distant views Beatification of urban street |
| Action 4: Improvement of business environment to encourage local people's involvement | - |
| Action 5:enhancement of sustainability as a tourism destination | Updating inventory of heritages (mid-long term plan) Visitor flow management Improvement of environment at heritage sites (waste treatment) Improvement of environment at heritage sites (rainwater drainage) Improvement of safety at heritages |

| Action | Tourism infrastructures |
|--------|--|
| | Controlling tourism activities at vulnerable |
| | monuments |
| | Basic Infrastructure development (mid-long |
| | term plan) |

For tourism development in Bagan, both tourism and basic infrastructure should be developed. As for pilot projects, the following tourism infrastructure is considered suitable:

 Table 6.6
 Pilot Project Long List (Tourism infrastructure)

| Action | Activities | Long list of Pilot Project | Project Completion within 3 Years | Permission from MoCul | Contribution to Strengthen Local Organization | Urgency | Cost Performance | Sustainability after JICA | Environmen tal and Social Impacts |
|---|---|---|--|--------------------------|---|---------|---------------------|------------------------------|--|
| Action 1: Tourism Pro | motion for increasing FITs | and Tourists during the Off-sease | on | | | | | | |
| | | • Development of cycling road in Bagan | А | Δ | Α | А | В | В | |
| | | • Development of heritage tour routes | Α | - | А | Α | А | В | - |
| | Improvement of | Development of car and bicycle parking | А | Δ | А | Α | В | В | - |
| Action 2: | access in the Archaeological Zone | • Development of green shades in heritage sites | А | Δ | Α | В | В | В | - |
| Improvement of Local Accessibility to | | • Direction and regulation signage | А | Δ | А | Α | А | В | - |
| Freely Approach | | Sand dust control | Α | Δ | С | Α | В | В | |
| Tourism Products | | Provision of resting facilities | А | Δ | А | А | В | С | - |
| | Improvement of TIC and Interpretation | • Renewal of tourist information center (TIC) | А | - | А | Α | В | В | Capacity of waste Treatment |
| | Board • Explanation of Code of cndact • Introduction of Uniquness | Provision of mini-theatre | Α | - | В | В | В | В | - |
| | | Provision of training spaces/meeting rooms | А | - | Α | А | Α | В | - |
| | | Provision of tourism signhoard | Α | Δ | Α | Α | A | В | - |
| | Improvement of interpretation of heritage | • Development of application for explanation of tourism site | А | - | В | В | В | С | - |
| | | • Improvement of museum exhibition | А | Δ | С | В | В | В | - |
| Action 3: | Introduction of alternative sun-rise and sun-set spots | Introduction of alternative destinations | А | - | А | Α | А | Α | |
| Improvement of Value and | | Development of new observation site | А | Δ | В | В | В | В | |
| Satisfaction of Tourism Products | • Beatification of Bagan | Improvement of landscape and scenery | А | - | Α | Α | А | В | - |
| | | Improvement of soft landscape by weeding and pruning | А | - | А | Α | А | В | |
| | | Improvement of long-distant views | А | - | А | Α | А | В | |
| | | Beatification of urban street | С | - | С | С | С | С | - |
| Action 4: Improven | nent of Business Environn | nent to Encourage Local Peoples' | Involvement | in Tourism | | | | | |
| | | Visitor flow management | Α | - | С | С | А | Α | - |
| Action 5: Enhancement of Sustainability as Tourism Destination | Heritage conservation and visitor management in the vulnerable heritage sites | Improvement of environment at heritage sites (waste treatment) | А | - | А | А | А | В | |
| | | Improvement of environment at heritage sites (rainwater drainage) | А | - | А | А | А | А | |
| | | Improvement of safety at heritages | А | Δ | А | Α | А | В | |

Source: JICA Survey Team

Long and mid-term developments are not feasible during pilot projects due to time constraints.

Hence they will be discussed as basic infrastructures development in the implementation plan.

6.6.3 Selection of Pilot Project Plan

(1) Criteria

The purposes of pilot projects are: to construct and strengthen the capacity of the infrastructure development promotion committee, to identify issues in the implementation plan and to transform it into more a feasible plan. Hence, the following four items are picked up as criteria envelope:

- Degree of contribution to Bagan tourism promotion organization.
- Time feasibility: Projects that can be completed within three target years.
- Continuity: Bagan stakeholders are able to manage and control after project completion
- Urgency

(2) Shortlist of Pilot Projects

At the second working group meeting (held on 24th June 2014), we evaluated the priority of projects under 3 grades by using four criteria (namely, 1) urgency 2) degree of contribution to Bagan tourism 3) time feasibility and 4) continuity by Bagan stakeholders). The following are the evaluation results:

These programmes include various pilot projects which may be excluded based on the budget and time limitation.

- Development of heritage tour routes (cycling roads, sightseeing routes around heritage sites and direction signs)
- Tourism information centres (TIC)
- Landscape Improvement (alternative viewing spot for sunset and sunrise, weed and waste treatment)
- Development of heritage tour routes (cycling roads, sightseeing routes around heritage sites and direction signs)

By developing heritage tour routes in the archaeological zone, FIT would be possible to comprehend the significance of Bagan tourism with a more comfortable manner, so that FIT could possible to extend their stay, become a repeat visitor and catalyst for Bagan tourism.

Proposed signage design along with the cycling road is shown in the following page:

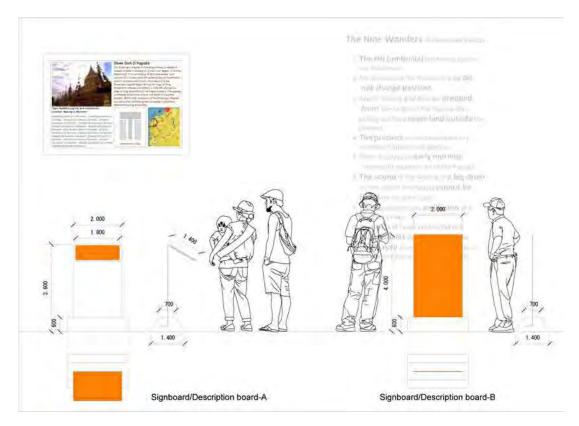


Figure 6.3 Signage along with Cycling Road

2) Renewal of Tourist Information Centre (TIC)

By renovating the existing Tourist Information Centre (TIC) and construction of a multipurpose hall and toilet in a beautiful garden setting within the existing site of TIC at New Bagan Town, the functions of TIC will be improved and expanded.

As the result of providing FIT the information related to local products and new functions of TIC such as refreshment and more detailed information on Bagan tourism, the new TIC will possible to provide the original functions of TIC and become a centre for tourism related associations and personnel as well as act as training facility for young staff.

The following figure shows the basic concept for renewal of TIC.

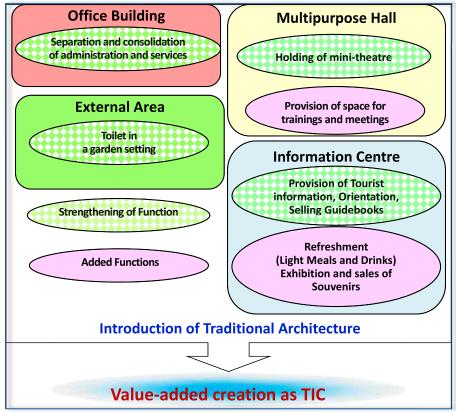


Figure 6.4 Strengthening and Addition of Functions in TIC

The renewal plan for the new TIC is shown in the next page.

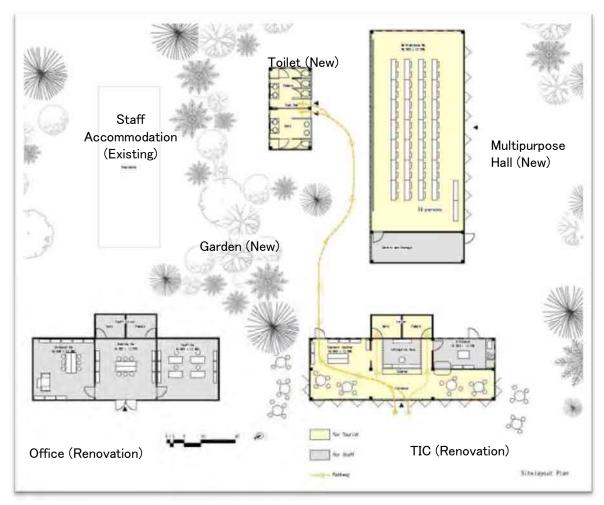


Figure 6.5 Renewal Plan for New TIC

3) Landscape Improvement (alternative viewing spot for sunset and sunrise, weeding and waste treatment)

Although the sunset and sunrise spots and landscape of ancient temples and pagodas are important assets of Bagan tourism, it would adversary affect and accelerate the deterioration of heritage buildings by the pressure of large number of tourists at specific locations.

It is also became a disincentive for cultural landscape and views to the monuments by accumulation of garbage around tourist spots and propagation of weeds and exotic invasive plants in the archaeological zone.

Therefore, it is importance for the member of Working Group to understand the value of cultural landscape and beautiful science of monuments through the planning activities of strategic landscape improvement and implementation plan in order to regain the original charm of Bagan, thus enable the sustainable tourism in Bagan.

The following photos show some example of potential observation spots and issues related to these sites:

Potential observation spot



Observation spot for river view and sunset.



Garbage is dumped at the entrance of the site.



Observation spot for river view and sunset.



Garbage dumping site behind the wall.



Observation spot without climbing the monument.



Ancient dumping site for clay pots. No access is established yet.

6.6.4 Implementation Plan of Pilot Projects

We recommend packaging individual projects, expecting more impact and more efficiency with respect to Bagan tourism strategy proposed in Chapter 4. Pilot projects shall be selected according to their priority depending on the budgets (although budget sizes of pilot projects are not yet specified).

Summary of pilot projects (expected outcome, contents, implementing public body and organization, input, subcontracting work, executing schedule and estimated cost) are shown next.

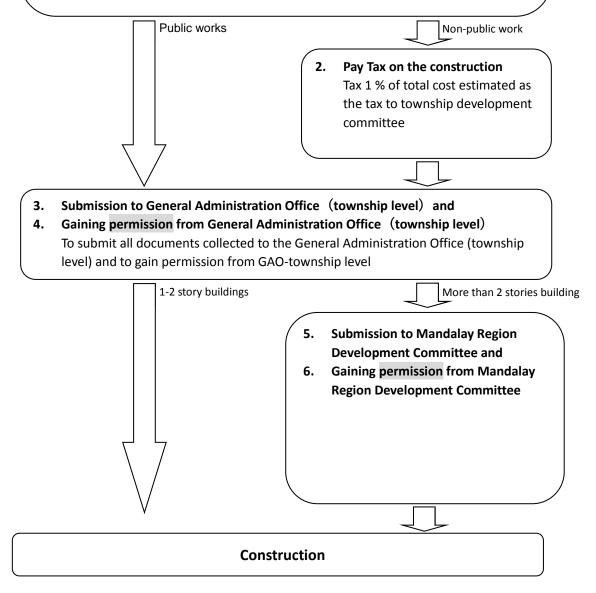
Table 6.7 Estimated Costs for Pilot Projects

| Activities | Work Component | Ks | USD |
|---|------------------------------------|-------------|---------|
| Activities | Work Component | Amount | Amount |
| 1 Creating routes for FITs | | 117,550,000 | 118,221 |
| 1-1 Basic design | | 6,280,000 | 6,316 |
| 1-2 Detailed design (preparation for dr | awing, specification and cost | 15,960,000 | 16,051 |
| estimation for each activity as nee | ded) | | |
| 1-3 Application to authorities | | 0 | 0 |
| 1-4 Preparation for tendering | | 630,000 | 634 |
| 1-5 Conducting tender (Division level a | nd District level) | 130,000 | 131 |
| 1-6 Commencement of the activities (| construction and production) | 94,550,000 | 95,089 |
| 2 Landscape improvement and manage | ment | 27,550,000 | 27,707 |
| 2-1 Basic planning | | 1,780,000 | 1,790 |
| 2-2 Detailed design (preparation for dr | awing, specification and cost | 10,960,000 | 11,023 |
| estimation for each activity as nee | ded) | | |
| 2-3 Application to authorities | | 0 | 0 |
| 2-4 Preparation for tendering | | 630,000 | 634 |
| 2-5 Conducting tender (Division level a | nd District level) | 130,000 | 131 |
| 2-6 Commencement of the activities (| construction and production) | 14,050,000 | 14,130 |
| 3 TIC enhancement | | 196,900,000 | 198,023 |
| 3-1 Basic design | | 1,780,000 | 1,790 |
| 3-2 Detailed design (preparation for dr | awing, specification and cost | 12,800,000 | 12,873 |
| estimation for each activity as nee | ded) | | |
| 3-3 Application to authorities | | 0 | 0 |
| 3-4 Preparation for tendering | | 630,000 | 634 |
| 3-5 Conducting tender (Division level a | nd District level) | 130,000 | 131 |
| 3-6 Commencement of the activities (| construction, production and so on | 181,560,000 | 182,596 |
| | | | |
| Summary | | Ks | USD |
| 1 Creating routes for FITs | | 117,550,000 | 118,221 |
| 2 Landscape improvement and managem | nent | 27,550,000 | 27,707 |
| 3 TIC enhancement | | 196,900,000 | 198,023 |
| | | 342,000,000 | 343,951 |

The application procedure for permissions necessary for the construction of facilities in Bagan is shown in the following figure:

1. Prepare application document

- Detailed design drawing (site layout plan, floor plans (including foundation), section, elevations, structure drawings, M/E drawings)
- Cost estimation
- Consensus built with the neighbourhoods on the building
- Permissions from the following four authorities:
 - Department of Archaeology/ Ministry of Culture
 - Department of health/ Ministry of Health
 - Department of fire /Minister of Social Welfare
 - General Administration Office (town level)



Source: JICA Survey Team

Figure 6.6 Procedures for Application and Permission Needed for Construction

6.7 Environmental and Social Consideration

6.7.1 Environmental Regulation in Myanmar

(1) Environmental Regulation

A series of laws and rules related to environment have been established in Myanmar. The following laws are considered in relation to with tourism and infrastructure developments in Bagan.

- Environmental Conservation Law (2012)
- The Conservation of Water Resources and Rivers Law (2006)
- The Protection and Preservation of Cultural Heritage Regions Law (1998)
- Protection of Wildlife and Wild Plants and Conservation of Natural Areas Law (1994)
- Forestry Law (1992)
- Public Health Law (1972)

As a result of increasing investments and development projects in Myanmar recently, preparation of environmental regulations are moving ahead at a fast pace. In accordance with the "Environmental Conservation Law" established in 2012, "Environmental Conservation Rules" were approved on 5th of June, 2014.

(2) Environmental Approval

Obtaining the environmental approval is becoming for a prerequisite for new projects and activities. The details are under preparation as "Environmental Impact Assessment Rules" expected to be established within this year according to an interview with staff of MoECAF. Detailed guidelines of Environmental Impact Assessment (EIA) and Initial Environmental Examination (IEE) are also under formulation although some projects have already commenced.

The draft project list in the 5th version of EIA or IEE requirement consists of eight categories, in which tourism related projects are categorized between "Infrastructure and Service Development Projects".

- Special Investment Projects
- Energy Sector Development Project
- Agriculture and Forestry Development Project
- Industrial Sector Development Project
- Infrastructure and Service Development Project
- Transportation
- Mining and Extractive Industry
- Social

To be more precise, the following six projects or activities are required to comply to IEE or EIA in the draft list. In case the size of project or activity is smaller than the specified size indicated in the table, the project or activity conducts neither IEE nor EIA but is only required to prepare an Environmental Management Plan (EMP).

Table 6.8 Draft Project List Required to Conduct EIA or IEE

| No. | Type of Project | IEE | EIA |
|-----|---|---|---|
| 190 | Hotel or resort construction project near the river or coastal area | - | ≧80rooms |
| 191 | Hill station resort or resort construction project Hotel construction project | 80 - < 200 rooms or total utilization area is 4,000 - < 10,000 sq. m | ≥ 80 rooms, total utilization area is ≥ 4,000 sq. m or ≥ 200 rooms, total utilization area is ≥ 10,000 sq. m |
| 192 | Tourism and resort development project in the National or provincial protected area | - | ≥ 50 ha |
| 193 | Development of tourist or recreational facilities on islands in surrounding waters which are gazetted as national marine park | - | All sizes |
| 197 | Other Tourist service centres (comprising infrastructure facilities and physical foundation)* | - | waste water volume ≥ 500 m3 |
| 224 | Restaurants | | ≥ 500 seats |

Note * No.197 supposes to be integrated into No.191 and its condition follows that of No.191 according to the interview with MoECAF as of July 2014

Source: MoECAF

A quick review of the draft guidelines showed that IEE in Myanmar included conducting public consultations. Therefore preparation of IEE is likely to take more time compared to other countries. The time period is determined by the size of project or activity. As stated by interviews with local consultants in Myanmar, preparation of IEE is expected to take any time between 8 to 10 months meanwhile that of EIA approximately one year.

6.7.2 Environmental Approval for Implementation of the Project

(1) Environmental Approval for Pilot Projects

With regard to environmental approvals for the Pilot Projects, the component of Tourism Information Center (TIC) improvement could be applied as "No.197 Other Tourist Service Centers" according to the above table. However No.197 assumes integration with No.191 and the same condition. Therefore all the pilot projects can be judged as exempted of EIA/IEE preparation before implementation. However although the TIC improvement project does not need to conduct either EIA or IEE, preparation of an EMP is required for obtaining environmental approval.

The draft contents of an EMP by MoECAF are listed below.

- 1) Description of the Project
- 2) Implementation of environmental conservation and socio-economic aspects of the project
- 3) Summary of impacts and mitigation measures
- 4) Management and monitoring plans during each of the phases of pre-construction, construction, operation, decommissioning and post decommissioning period
 - a) Items to be included in each plan

- Objectives
- Legal requirements
- Overview maps, site plans, photos, aerial photos and satellite photos
- Management activities
- Monitoring plans
- Implementation timeline
- Allotment of funds and responsibilities
- b) Management and Monitoring Plans
 - Sectoral plans; Air quality, water quality, waste, noise, odour, chemical, soil erosion and siltation, biodiversity, occupational health and safety, cultural heritage, job opportunities and training
- c) Emergency Preparedness

The procedure of environmental approval has two patterns. One is the project owner from private investor shall bring the project proposal to Myanmar Investment Committee (MIC) which provides a one stop service for investments and development projects in Myanmar. The other is when the project owner is the government with a project proposal that shall be submitted to MoECAF from the relevant Ministry. In case of this Project, the proposal shall be approved by the Union Minister of MoHT and then submitted to MoECAF and relevant ministries by MoHT. This procedure might be changed depending upon the project size.

(2) Environmental Approval taking account of Preparation of Implementation Plan

Preparation of an implementation plan needs to take into account environmental approval as well. Some projects of basic infrastructure in the long list are expected to prepare IEE or EIA according to the draft project list of EIA/IEE requirement as shown in the following table. The other projects also may need it since the project list is still under review by MoECAF. Before preparation of the implementation plan, update of the information is necessary.

Table 6.9 Projects of Basic Infrastructure and Draft Projects of EIA/IEE

Requirements by MoECAF

| No. | Type of Project | IEE | EIA | | | | |
|------------|---|------------------|--|--|--|--|--|
| Airport in | Airport improvement | | | | | | |
| 225 | New or expansion runway airport construction project | 1,000 - < 2,500m | ≥ 2,500m | | | | |
| 226 | Airstrip development in state and national parks | - | All sizes | | | | |
| Road de | velopment | | | | | | |
| 211 | Road construction through national or provincial protected areas | - | All sizes | | | | |
| 213 | Expressway | - | All sizes | | | | |
| 217 | New road construction project (national, provincial, district, urban, extra construction) | - | All sizes | | | | |
| 218 | Road improvement project (national, provincial, district, urban, extra construction) | All sizes | All projects which is suggested to do EIA in IEE process | | | | |
| 219 | Road rehabilitation or upgrading project (national, provincial road rehabilitation) | All sizes | All projects which is suggested to do EIA in IEE process | | | | |
| Rain wat | Rain water drainage | | | | | | |
| 203 | Water drainage system of urban and residential area | - | ≥ 5 km | | | | |

| No. | Type of Project | IEE | EIA |
|-----------------|--|-----|------------------|
| 205 | Dredging | - | ≥ 50,000m3 |
| Waste treatment | | | |
| 206 | Damping site | | ≥ 200,000 people |
| ICT impr | ovement | | |
| 207 | Telecommunication network construction project | | ≥ 100km |

Source: MoECAF

According to the draft rule, the EIA survey could be done by a third party who is a licensed consultant by MoECAF. However at this moment there are no capable consultants in Bagan. Implementation plan needs to take account of such circumstance.

6.7.3 Initial Scope of the Pilot Projects

(1) Environment in Bagan

Natural and social environment in Bagan are referred to in Chapter 2.

Based upon the interview with the tourist police in Bagan, negative impacts from tourists such as burglaries, accidents and sex industries have not increased although the number of tourists has sharply increased since 2011.

(2) Initial Scope of the Pilot Project

The following three components of the pilot projects are examined for negative impacts over two phases namely construction and operation phases, with a basis of check lists provided within "Environmental and Social Consideration Guideline, April 2010" prepared by JICA,

- Creating routes for FITs
- · Landscape Improvement and Management
- Tourism Information Center

Table 6.10 Initial Scoping of the Pilot Project

| | Impact | | Creating routes for FITs | | Tourist Information Center | | Landscape Improvement and Management | |
|---------------------|--|---|--------------------------------|-----------------------|----------------------------------|-----------------------|---|--|
| | | | Operation Phase | Construction Phase | Operation Phase | Construction Phase | Operation Phase | |
| | Involuntary Resettlement | - | - | i | ı | ı | - | |
| | Land acquisition | - | - | - | - | - | - | |
| | Local economies | - | - | - | - | - | - | |
| | Land use and utilization of local resources | - | - | - | - | - | - | |
| | Social institutions | - | - | - | - | - | - | |
| | Existing social infrastructures and services | С | - | С | - | - | - | |
| ant. | Poor, indigenous, or ethnic people | - | - | - | - | - | - | |
| J mc | Misdistribution of benefits and damages | - | - | - | - | - | - | |
| jo | Local conflicts of interest | - | - | - | - | - | - | |
| Social Environment | Limitation of accessibility to information, meetings, etc. on a specific person or group | - | | - | - | - | - | |
| Soci | Gender | - | - | - | - | - | - | |
| 0) | Children's rights | - | - | - | _ | _ | _ | |
| | Cultural heritage | С | - | - | _ | - | _ | |
| | Infectious diseases such as HIV/AIDS | - | _ | - | _ | _ | _ | |
| | Health and sanitation | - | - | - | - | - | - | |
| | Water right and usage | - | - | - | _ | _ | _ | |
| | Accidents | С | _ | _ | _ | _ | _ | |
| | Topography and geology | - | _ | | | | | |
| Ę | Soil erosion | - | - | - | - | - | | |
| - Juli | Groundwater | - | | | | | | |
| Natural Environment | | - | - | - | - | - | | |
| <u> </u> | Flow of hydrological features Biota and ecosystems | - | | - | - | - | | |
| <u>8</u> | • | - | - | | | | | |
| atul | Meteorology | | | | | - | | |
| Z | Landscape | - | - | - | - | | - | |
| | Global warming | - | - | - (| - | - | - | |
| | Air pollution | С | - | С | - | - | - | |
| | Water pollution | - | - | - | - | - | - | |
| on | Soil pollution | - | - | - | - | - | - | |
| Pollution | Waste | С | - | С | - | - | - | |
| Ро | Noise and vibration | С | - | С | - | - | - | |
| | Ground subsidence | - | - | - | - | - | - | |
| | Offensive odour | - | - | - | - | - | - | |
| | Bottom sediment | - | - | - | - | - | - | |

Note: "A": serious impact, "B": some impact, "C": minor impact, "-": no impact

(3) Expected Negative Impacts

Based upon the result of scoping, expected negative impacts are indicated in the above table. The size of impacts is reliant upon the location, especially impacts on the heritage.

Coordination and discussion with MoCul before implementation could reduce such impacts efficiently. In addition the impact could be minimized by means of appropriate countermeasures. The expected impacts and countermeasures are shown in the following table.

Table 6.11 Expected Impact by Pilot Projects and Countermeasures

| Name of | Phase | Expected Impact | Countermeasures | | | |
|----------------------------------|--|---|---|--|--|--|
| Component | | · | - Countermodes and | | | |
| Existing social ii | Existing social infrastructures and services | | | | | |
| Creating routes for FITs | Construction Phase | Small impacts are expected to affect road users by partial and/or temporary closure of roads in the project area in order to improve the route and drainage improvement. | The impacts would occur temporary only during the construction phase. The extent of impact could be reduced by traffic control and information sharing to | | | |
| Tourism Information Center | Construction Phase | Minimal impact is expected to the road users by partial and/or temporal closure of roads in the project area in order to build TIC. | local people and communities beforehand. | | | |
| Heritage | | | | | | |
| Creating routes for FITs | Construction Phase | Installation of sigh boards and simplified rest stations might make minor impact on heritage. The size is dependent upon the location. | The impacts on the heritage could depreciate by means of detailed discussion with MoCul and relevant organizations and well considered | | | |
| Tourism Information Center | Construction Phase | New construction of TIC might have nominal impacts on heritage. The size is dependent upon the location. | selection of project site. Depending upon the location, the excavation surveys need to be carried out before implementation. | | | |
| Accident | | | | | | |
| Creating routes for FITs | Construction Phase | Partial and/or temporary interruption of traffic flow on roads in the project area for pavement needed for routes and installation of rainwater drainage may cause accidents. However the project area does not have much traffic and the impact is expected to be minuscule. | The impacts occur temporarily during the construction phase. The number of accidents could be reduced by appropriate traffic control and information sharing with local people and communities beforehand. Reducing potholes and ruts on the roads by road pavement improvement could improve road surfaces and provide comfortable drives for road users. | | | |
| Air Pollution | | | | | | |
| Creating routes for FITs | Construction Phase | Minor dust expected from road pavement construction and passage of heavy vehicles although the impacts will be slight since within the heritage site there are not many houses | Dust could be reduced by regular water sprinkling. | | | |
| Tourism Information Center | Construction Phase | Minor dust expected to be generated by TIC renovation and construction and passage of heavy vehicles | Dust could be reduced by regular water sprinkling and covering the construction site with a sheet. | | | |
| Waste | | | | | | |

| Name of Component | Phase | Expected Impact | Countermeasures |
|----------------------------------|-----------------------|--|---|
| Creating routes for FITs | Construction Phase | Hazardous waste could not possibly be generated however some solid waste would be created by road pavement construction and installation of rainwater drainage. | Solid waste caused by the construction and domestic waste from workers needs to be disposed in accordance |
| Tourism Information Center | Construction Phase | Hazardous waste will not be produced however some solid waste could be created by construction and renovation of TIC. | with local rules. At the same time, contractors and workers will be sensitized about the disposal. |
| Noise and Vibra | tion | | |
| Creating routes for FITs | Construction Phase | Noise and vibration may be caused by road pavement laying and passage of heavy vehicles. However the impact is minor since there not many residences within the heritage area. | Before implementation, detailed social environment of the project site needs to be understood. In case of houses, schools or hospitals near the site, a road pavement schedule shall be controlled for reduction of the impact. Prior explanation to local residents is also necessary. |
| Tourism Information Center | Construction Phase | Noise and vibration may be caused by renovation and construction of TIC and passage of heavy vehicles. However the impact is small because the construction would exclude deep piling or/and large foundation works since the buildings planned are small in size. | Noise and vibration could be reduced by covering t the construction site with a sheet. Schedule of earth works is controlled. Prior explanation to local residents is also necessary. |

CHAPTER 7 TOURISM HUMAN RESOURCE DEVELOPMENT

In this chapter, basic direction and framework of implementation plan and candidates of pilot project are proposed to materialize the strategic direction of future Bagan Tourism described in the chapter 4. The proposals in this chapter are developed based on the results of the survey and discussion with stakeholders in Myanmar. They shall be subject to finalize in the next stage of the project.

7.1 Roles of HRD in Tourism Development Actions in Bagan

The tourism development actions described in Chapter 4 aim at attracting foreign tourists by differentiated branding with emphasis on differentiation the Buddhist ruins from others, contributing to local economies by providing a variety of tourism products, and creating sustainable tourism destination. Therefore five strategies are prepared. Tourism promotion is necessary for increasing number of FIT and tourists in the off season in order to increase the length of stay and expenditures (Action1). To improve the access to the tourism products and environment is necessary (Action2). Betterment of tourist products and increase of tourist's satisfaction could increase VFM and achieve the reputation (Action3). On the other hand to enhance local economy and job opportunities is expected by supporting for environmental improvement of tourism business for local people such as restaurants, souvenir related business and tour agents (Action 4). To secure the sustainability as a tourist destination shall be carried out by repeat the cycle of these actions (Action5).

Tourism HRD is essential for introducing more value-added tourism products and services as well as maintaining sustainable tourism development. The following table indicates necessary measures in HRD.

Table 7.1 Necessary HRD Measures in Bagan

| Actions | Measures in HRD | |
|--|--|--|
| Action 1: Tourism Promotion for increasing FITs and Tourists during the Off-season | | |
| Action 2: Improvement of Local Accessibility to Approach Tourism Products | | |
| Antique Oct. | Tourist Service Training | |
| Action 3: Improvement of Value and Satisfaction of Tourism Products | •Tour Guide Training | |
| or rounsmir roudets | | |
| Action 4: Improvement of Business Environment | Public Awareness Programs on Tourism | |
| to Encourage Local People's Involvement in Tourism | Beginners Training for High School Students | |
| | Continuous Supply of Workforce (tourism training school) | |
| Action 5: Enhancement of Sustainability as a Tourism Destination | •Training for Improvement of Medical Care for tourists | |
| Todalon Boomaton | ·Capacity Development for tourism management | |

Source: JICA Survey Team

7.2 Needs Analysis of Tourism HRD

7.2.1 Tourism Employment Demand

(1) Tourism Employment in Myanmar

Although the GOM doesn't currently generate industry-wide employment data, World Travel and Tourism Council (WTTC) estimates that travel and tourism directly supported 338,500 jobs (1.2% of total employment) in 2013, and this is forecasted to grow by 12.0% in 2014 to 379,000 which is(1.3% of total employment). This includes employment by hotels, travel agents, airlines and other passenger transportation services (excluding commuter services). It also includes; the activities of the restaurants and leisure industries directly supported by tourists. By 2024, travel and tourism will account for 671,000 jobs directly, an increase of 5.9% p.a. over the next ten years.

The total contribution of travel and tourism to employment and linkages to investment, supply chain and induced impacts was 823,500 jobs (3.0% of total employment) in 2013. This is expected to rise by 6.5% in 2014 to 877,500 (3.1% of total employment) by 2024, travel and tourism is forecasted to support 1,323,000 jobs (4.0% of total employment) an increase of 4.2% p.a. over the same period.

(2) Tourism Employment in Bagan

In Bagan, the JICA Survey Team estimated direct tourism employment in 2013 was as shown in the following table.

The total population in Bagan (Nyaung-U Township) in 2013 was around 200,000. The direct tourism employment is estimated at 4.0%, much higher than the national average (1.2%). For this estimation, the work force in Bagan was assumed to be at 70% of the total population.

The population of Nyaung-U Township was approximately 242,000 in 2014 as shown in Chapter 2, and the future population was estimated to approximately 249,000 in 2020 as shown in Chapter 6. Approximately 5,000 to 5,500 new job opportunities will be created by 2020 in accordance with the increased number of foreign tourists described in Chapter 4.

Table 7.2 Estimation of Tourism Employment in Bagan

| Туре | 2013 | 2020 | Remarks |
|-------------------------------|---------------|----------------|---|
| Hotels | 3,000 – 3,500 | 6,000 – 7,000 | 2,400 rooms in 2013, 4,800 rooms in 2020 |
| Travel Agencies | 100 | 200 | 40 - 50 agencies in 2013 |
| Airlines | 50 | 100 | 9 airlines in 2013, excluding technical staff |
| Other Transportation Services | 500 | 1,000 | 220 horse carts in 2013 |
| Restaurants for Tourists | 500 | 1,000 | 100 restaurants in 2013 |
| Leisure Industries | 500 | 1,000 | |
| Retails and Souvenir Shops | 500 | 1,000 | |
| Total | 5,150 - 5,650 | 10,300 -11,300 | |

Source: Estimation by JICA Survey Team

7.2.2 Tourism HRD Needs in Bagan

(1) Tourism Administration Officers and Tourist Information Center Staff

Tourism Administration Officers are needed to widen knowledge and experience allowing them to support local tourism development and promotion in line with the national tourism development policy and strategy while fostering effective coordination among public-private stakeholders and local residents. They are expected to play new roles as coordinators and facilitators for local tourism promotion which is crucially important as well. Their roles also should be changed from the previous ones such as supervisors of the private sector and public tour operators.

Group tourists never make use of tourist information centers. In order to make tourism an effective tool for improving the local economy and living standards of local residents in line with the national tourism development policy that is; "Responsible Tourism," "Community Involvement in Tourism" and "Tourism Master Plan 2013-2020," it is necessary to provide adequate information to FIT who visit the tourist information centers. The ideal tourist information centers needs to provide information timely and attractively. Consequently, the staff needs to keep collecting, updating and filing the necessary information. They need to upgrade their related knowledge and skills as well. It is also important that they collaborate effectively with the private sector. Participation of the private sector in delivering tourist information e.g, hotel and restaurant counters is also useful.

(2) Lodging Industry

It is under consideration that an in-house training system as a part of a human resource management scheme is established at 3-star and 4-star hotels in Bagan¹. The results of an in-house training however, relies much on the knowledge and experience of supervisors who are assumed to be in-house trainers and the attitude of managers and management policy of owners. In particular, upgrading of knowledge and experience of supervisors would be the key to improvement of hospitality and services at all the accommodation facilities in Bagan, since they could there after train other employees through improved in-house training and OJT (cascade effect).

For smaller hotels which happen to be more in number than 3-star and 4-star hotels, the approach may not be the same. First of all, it is important to raise the awareness of owners whose professional knowledge and experience might be limited. Secondly, the hospitality and service skills of managers who take care of all the employees hence being under the owner's instructions must be improved. In smaller hotels and guest houses, furniture and equipment such as beds and linen aren't always of the same specification standard as those in 3-star and 4-star hotels. The training method for example of bed making or cleaning bathrooms is to be flexible.

¹ High graded hotels are likely to carry out in-house training for their employees rather than external trainings. Meanwhile, low graded hotels such as 1-star or 2star hotels need to have external trainings due to luck of regular trainers in their hotels.

(3) Travel Agencies and Tour Operators

Taking into account that travel agencies and tour operators in Bagan² are simple and small on scale, technical training needs of employees may not be so high. Most of such small scale travel agencies are branch offices of the travel companies in Yangon and the services are mainly to arrange station guides and transportation in Bagan. They rarely meet tourists and speak English.

On the other hand, managers need to have marketing knowledge and skills about the most important issues for extending tourists' stay in Bagan and increasing their satisfaction. The managers need to have more market-oriented mindsets, deal with tourists with more hospitality, develop a variety of attractive and innovative tourism products and tours etc. For this purpose, seminars, symposium or forums are to be held periodically.

(4) Tour Guides

The number of foreign tourists in Bagan in 2013 was about 200,000 among which half were supposedly accompanied by "guides" from Yangon or other cities. If this is true, the remaining half (100,000) were FIT. Assuming that half of FIT were backpackers, the number of FIT who could hire "station guides" was around 50,000. Assuming that one "station guide" was shared between two FIT, the maximum daily number of "station guides" was less than 100 even in the highest tourist season between November and March. The current numbers of "station guides" is 130 and "regionally licensed guides" is 108 which meet the demand for the moment.

However, sixty (60) regionally licensed holders among the 108 aren't working as tour guides. If Bagan wants to attract more FIT who are considered to have higher potential for contributing to the local economy, it is necessary to make these license holders become involved in the tour guide service as well as obtain continuous training for upgrading of their knowledge and skills.

In addition, it would be reasonable to encourage these regional license holders to join in MTGA and create opportunities for upgrading to national license holders after a certain period of experience.

(5) Other Tourist Services and Local Residents

It is important that local residents understand well that responsible tourism development and promotion can contribute to the local economy to a great extent. They also need to recognize tourists' needs and behavior and act towards sustainable tourism development and promotion.

Through the public awareness programs targeted at local residents, mainly the youth living around Bagan, it is anticipated that they will seek jobs in the tourism sector such as hoteliers, tour guides, restaurant staff etc, without hesitation³. Their parents will also realize the

In Bagan, there are some travel agencies dealing with air ticket sales. These agencies tend to have periodically training by manager from main office in Mandalay and so on since they are in small scale, two or three staff only. Thus uniform trainings are not necessary for such agencies.
 The awareness of tourism industries between urban and rural areas in Bagan seems to be different.

The awareness of tourism industries between urban and rural areas in Bagan seems to be different. Enhancement of engaging in tourist service could contribute to link between the most potential industry and regional developments, and to reduce outflow of younger generation to seek job opportunities outside Bagan.

importance of their children learning foreign languages at schools, protection and preservation of the traditional life style and culture. This will benefit all the people in Bagan therefore, strengthening tourism human resource development⁴.

(6) Tourism Development Vision and Tourism HRD Needs

Based on the above-mentioned tourism development needs, necessary measures for tourism HRD can be classified into 5 Actions explained in the previous chapter.

Table 7.3 Tourism Development Actions and Tourism HRD Measures

| Tourism Development Actions | Necessary HRD Measures for Achieving Actions | Relevance with Needs |
|---|--|---|
| Action 1: Tourism Promotion for increasing FITs and Tourists during the Off-season | | |
| Action 2: Improvement of Local Accessibility to Approach Tourism Products | | |
| Action 3: Improvement of Value and Satisfaction of Tourism | Tourist service training (front Office, housekeeping, F&B, food productions etc.) | • Correspondence to needs (2), (5) |
| Products | • Tour guide training (national guide, regional guide, various language etc.) | Correspondence to need(3) |
| Action 4: Improvement of Business Environment to Encourage Local People's Involvement | entrepreneurs, SEMs, organic | Correspondence to need(5) |
| in Tourism | Beginners training for high school students (training of students at week-ends and term-breaks) | • Correspondence to need (5) |
| Action 5: Enhancement of | Continuous supply of workforce (establishment of hotel training schools under cooperation of BTA and private training school) | Correspondence to need(5) |
| Sustainability as a Tourism Destination | Training for improvement of medical care for tourists (training for medical staffs) | Correspondence to need(5) |
| | Capacity development for tourism management (PP symposium) | • Correspondence to needs (1),(2),(3),(4) |

Source: Working Group-3, JICA Survey Team

7.3 Process for Tourism Human Resource Development in Bagan

This chapter describes the necessary process for tourism human resource development in Bagan.

(1) Establishment of HRD Committee for Local Tourism Development

An ad-hoc committee for discussing issues related to local tourism human resource

⁴ Many people living in Bagan are engaged with tourism industries. There are however limited job opportunities for people who has a degree of university or/and college. New business opportunities therefore need to establish for them.

development and promoting human resource development is to be established among the public and private stakeholders. The Working Group-3 (WG3) under the JICA Project can be the starting point for the said committee.

(2) Tourism HRD Baseline Survey

First of all, the WG3 will conduct the following surveys in order to identify accurate local HRD needs.

- Survey on HRD needs of tourism industry.
- Survey on perception of tourism among high school students who are considered to be reserves for the industry.
- Survey on perception of tourism among local residents.

(3) Formulation of the Implementation Plan

JICA Project Team will formulate the Implementation Plan (2020) in cooperation with WG3 based on the above survey results and the tourism development vision. Refer to Section 7.4 for more details.

(4) Implementation of Pilot Projects

MoHT and JICA will select the pilot projects to be implemented. JICA Project Team will formulate a detailed action plan for the selected pilot projects in cooperation with WG3. WG3 will implement these pilot projects. For more details, refer to Section 7.5.

(5) Monitoring and Feedback from the Pilot Projects

WG3 will conduct periodical monitoring of the action plan. WG3 will meet every quarter for confirmation of the monitoring results.

Throughout the entire Project period, a model for tourism HRD in regional tourism development will be established.

(6) Execution of the Implementation Plan

WG3 (at this moment, WG3 will have been transformed into the Tourism HRD Committee) will continue executing the Implementation Plan (2020).

7.4 Implementation Plan

7.4.1 Scope of Implementation Plan

Tourism HRD Implementation Plan aims at securing capacity development and sustainable supply of tourism HRD described in Chapter 4. For this reason, the following 5 elements are to be included in the Implementation Plan.

- Mid-term measures for both quantity and quality of tourism HRD.
- Measures of tourism HRD management.
- · Public awareness in regards to tourism.
- Capacity development for tourism administration and related organizations.
- Measures for ensuring self-reliance and sustainability of the HRD Committee (WG3.

7.4.2 Execution of the Implementation Plan

(1) Expected Output

Mid-term tourism HRD plan in Bagan and its implementation plan was formulated.

(2) Contents

Items to be included in Implementation Plan are as follows:

- Assess the tourism HRD based on the results of the Baseline Survey.
- Set up the HRD target groups and target achievements for them.
- Formulate HRD programs.
- · Formulate the Implementation Plan of HRD (structure and finance plan).
- · Implement the pilot projects in accordance with the structure and finance plan above.
- Based on the monitoring results, review the HRD programs and Implementation Plan.

(3) Structure

The Stakeholders and their roles are described below.

| Organization | Roles | |
|-------------------|--|--|
| | •Decision making upon JCC | |
| MoHT | Assignment of counterpart personnel | |
| | Participation in planning process of implementation plan | |
| MoUT Doggo | Participation in WG3 | |
| MoHT Bagan | Assignment of counterpart personnel | |
| | •Management of WG3 | |
| WG3 | Inputs to the Implementation Plan | |
| WG3 | Implementation and monitoring of Pilot Projects | |
| | Implementation of the Implementation Plan | |
| | •Technical support for WG3 | |
| JICA Project Team | •Formulation of the Implementation Plan | |
| JICA Project ream | ·Technical support to Pilot Projects | |
| | Review of Implementation Plan | |

(4) Input of JICA

Two areas of expertise in tourism HRD are needed for the following purpose:

- · Tourism HRD Strategy: Formulation of tourism HRD Implementation Plan.
- Tourist Service Training (tour guides, hotels and restaurants): Provision of technical assistance to various HRD training programs

Tourist Service Training experts include short-term experts in specific areas such as tourist service training, tour guide training are deemed necessary in accordance with the HRD programs.

(5) Sub-Contract Survey

None

(6) Implementation Schedule

The Implementation Plan is to be formulated in the first year

- · Formulation period: 6 months.
- · Approval period of MoHT: 3 months.

In the second year, monitoring of pilot projects is conducted.

The Implementation Plan will be reviewed and revised in the third year based on the outcomes of pilot projects.

Revision period: 3 months.

7.5 Pilot Projects.

7.5.1 Objectives of Pilot Projects

The purposes of Pilot Projects are:

- To guarantee the quality of HRD to meet the market needs through the PDCA cycle of pilot projects.
- To develop capacity of WG3 through implementation of pilot projects.
- To identify a financially feasible business model for WG3 with which WG3 can continue HRD measures in a self-reliant and sustainable manner.
- To establish an effective Implementation Plan by identifying issues ahead, through implementation of pilot projects.

7.5.2 A List of Pilot Projects

The following candidate pilot projects were proposed at the 1st Working Group meeting held on 4 and 5, June 2014 in Bagan. These include the projects that constitute part of the Short-Term HRD Plan (2017) and the projects to prove effectiveness or consolidate basis for the Mid-Term HRD Plan (2020).

Table 7.4 A List of Pilot Projects (Tourism HRD)

| Issue | Category | Project | Responsible Agency |
|-------------------------|-----------------------------------|---------------------------------------|--------------------|
| | | Front Office | MoHT-MTF |
| | Tourist Service Training | Housekeeping | MoHT-MTF |
| | (Basic – Intermediate – Advanced) | Food and Beverage (F&B) | MoHT-MTF |
| | Auvanceu) | Food Production | MoHT-MTF |
| Tourism Human | Tour Guide Training | Upgrading of National Licensed Guides | MoHT-MTF |
| Resource Development | | Upgrading of Regional Licensed Guides | MoHT-MTF |
| | Training for Tourist Medical Care | Tourist Medical Care Training | MoHT-MTF |
| | Public Awareness | General Public | |
| | Programs for Local | (Tourism and Improvement of Life | GAD-MTF |
| | Residents | Standards) | |

| Issue | Category | Project | Responsible Agency |
|--------------------------------------|--|---|-----------------------------|
| | | Drivers including Horse Carts (Hospitality, Safety, etc.) | GAD-MTF |
| | | Restaurants and Retails Shops (Garbage Disposal, etc.) | GAD-MTF |
| | | Entrepreneurs, SME, etc. (Buisines Support, etc.) | GAD-MTF |
| | Tourism Classes for High School Students | Weekend/Vacation Tourism Seminar for High School Students | MoE-MTF |
| | Establishment of Hotel Schools | Invitation of Private Hotel Schools | MoHT-MTF-Private |
| | Tourism Management | Quarterly Public-Private Symposium | MoHT-MTF |
| | | Counterpart Training in Japan | JICA-MoHT |
| Training Programs outside of Myanmar | | Third party Country Training (Study Tours) | МоНТ |
| Training Programs | · | Japan-Singapore Partnership Program for the 21st Century (JSPP21) | JICA-MOFA Singapore-MoHT |

Note: Training Programs outside of Myanmar are not part of pilot projects.

Source: Working Group-3, JICA Survey Team

7.5.3 Selection of Candidate Pilot Projects

(1) Criteria for Selection

The purpose of pilot projects is to establish and strengthen the HRD Committee (WG3) and formulate an effective Implementation Plan through the PDCA cycle. Therefore, the following four (4) criteria were used for selecting candidate pilot projects. They are: 1) contribution to tourism promotion in Bagan, 2) possibility to complete within the 3-year project period, 3) possibility of continuity by tourism stakeholders in Bagan and 4) urgency of the measure.

(2) Short List of Pilot Projects

Based on the list of pilot projects explained in the previous section, prioritization was made during the second Working Group meeting held on June 24, 2014 in Bagan. For prioritization, the 4 criteria (urgency, contribution to strengthening local tourism organizations, possibility to complete within 3-year project period and sustainability after 3-year project period) were used. The results are shown in the following table.

Table 7.5 Short List of Pilot Projects (Tourism HRD)

| Category | Pilot Projects | Responsible Agency | Notes | Priority |
|--|---------------------------------------|--------------------|-------|----------|
| T T | Front Office | MoHT-MTF | 12 | Α |
| Tourist Service Training (Basic, Intermediate, | Housekeeping | MoHT-MTF | 12 | Α |
| Advanced) | Food and Beverage (F&B) | MoHT-MTF | 12 | Α |
| Advanced | Food Production | MoHT-MTF | 10 | В |
| Tour Guide Training | Upgrading of National Licensed Guides | MoHT-MTF | 10 | В |
| | Upgrading of Regional Licensed | MoHT-MTF | 12 | Α |

| Category | Pilot Projects | Responsible Agency | Notes | Priority |
|--|--|--------------------|-------|----------|
| | Guides | | | |
| Training for Tourist Medical Care | Tourist Medical Care Training | MoHT-MTF | 8 | С |
| | General Public (Tourism and Improvement of Life Standards) | GAD-MTF | 12 | Α |
| Public Awareness Programs for Local Residents | Drivers including Horse Carts (Hospitality, Safety, etc.) | GAD-MTF | 10 | В |
| IOI LOCAI RESIDENTS | Restaurants and Retails Shops (Garbage Disposal, etc.) | GAD-MTF | 10 | В |
| | Entrepreneurs, SME, etc. (Buisines Support, etc.) | GAD-MTF | 10 | В |
| Tourism Classes for High School Students Weekend/Vacation Tourism Seminars for High School Students | | MoE-MTF | 12 | А |
| Establishment of Hotel School | Invitation of Private Hotel School | MoHT-MTF-Private | 6 | С |
| Tourism Management | Quarterly Public-Private Symposium | MoHT-MTF | 12 | А |

7.5.4 Action Plan of Pilot Projects

In order to make the pilot projects more effective and efficient, candidate pilot projects are recommended to be implemented in a form of a package according to each measure, depending on available budge.

Outlines (expected outputs, activities, implementing agencies, inputs, sub-contact, implementation schedule, approximate cost, etc.) of each category of pilot projects are described below.

(1) Tourist Service Training

In Bagan, the improvement on the quality of accommodation and food industries is considered to be priority as these industries contribute greatly to the regional economy.

Work divisions in accommodation and food industries can be grouped into "front office", "housekeeping", "food and beverage" and "food production". As earlier mentioned, upgrading training of supervisors for middle and high graded hotels⁵ (a cascading effect is anticipated) and practical basic skills training for small scale hotels such as 1-star and no star hotels/guest houses in accordance with the current situation are to be conducted.

In general, each training session is to be organized with the trainees between 20 and 40, and a period of 8 weeks, though slightly different depending on the work division. The division to be started with must be chosen based on the results of the needs survey explained in the previous section. The training is to be carried out by using the hotel facilities during the off season between June and September by master trainers of MHPA and MTHRDA. During this period,

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⁵ Middle and high grade hotels include 2-star and 3-star hotels and relatively large-scale hotels, more than 60 rooms, without star grade such as Exottismo Travel Group.

multiple sessions can be organized simultaneously or consecutively.

Tourist Service Training

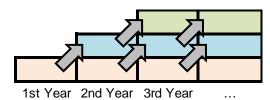
materials: USD 6,000)

In addition, higher level sessions are to be introduced so that the trainees can continuously upgrade their levels year by year.

Category:

Remarks:

Advanced Level Intermediate Level Basic Level



| ı | 5 , | 9 |
|---|-----------------|--|
| | Pilot Projects: | Front Office, Housekeeping, Food & Beverage, (Food Production ⁶) |
| ı | Outputs: | Improved skills of employees in tourist services |
| | Activities: | Conduct training for tourist service employees depending on the different scale and grades of hotels and restaurants (basic, intermediate and advanced levels) |
| ı | | Each session lasts for 4 to 8 weeks and targets 40 trainees in principle. |
| ı | Agencies: | MoHT, MTF (MHPA, MTHRDA, MHA, MRA, etc.) |
| | Inputs: | Myanmar: Training rooms (hotels and restaurants), trainers (MHPA, MTHRDA, etc.) |
| | | Japan: Technical support for training management, advice provided by experts in specific areas of tourist services |
| ı | Sub-Contract: | None |
| ı | Schedule: | Y1: 2 sessions, Y2: 2 sessions, Y3: 0 sessions |
| ı | Cost: | USD 36,000 (for 3 years) |
| | | (Trainers' traveling expenses: USD 1,000, Training room: USD 20,000, Training |

(2) Tour Guide Training

Tour guides should read books to improve on their knowledge during the off season. However, by nature of the job, a tour guide is a freelance job and occasion for learning from other guides' practice is very limited.

sessions can be increased depending on available funding.

Duration of sessions can be flexible depending on needs. The number of

In Bagan, there are a number of a decade's-experienced national-licensed guides. Transferring skills and knowledge to the next generation is more important than other issues.

As for the 108 regional-licensed guides only 40 among them are working. If tour guides don't practice for a long time, skills for guiding will deteriorate and disappear. It is necessary to organize follow-ups to make use of their license. It is also vital from the point of view of sustainability of the efficient regional license system.

Conversely, the issue of insufficient linguistic guides that can speak other languages other than English can't be easily solved in Bagan. Being an English-speaking guide is the first requirement for both the national and regional guides as all the training materials and lectures are in English. For those who want to become other language guides other than English, they

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⁶ Food production training is not included in the pilot project supported by JICA. The training plans to carry out initiated by Myanmar side in 2nd or 3rd year.

need to fully master the language that they want to speak. As there is no language school other than English in Bagan7, they must go to Yangon to study or find private lessons in Bagan. The decision must be made by the tour guides judging the market needs. It is desirable that MoHT and MTGA encourage their learning environment and provide related information.

| Category: | Tour Guide Training |
|-----------------|--|
| Pilot Projects: | Upgrading of Regional Licensed Guides, (Upgrading of National Licensed Guides ⁸) |
| 0 () | , |
| Outputs: | Improved skills of tour guides and established mechanism for it |
| Activities: | Technical exchange among national licensed guides (1 week including study tour, targets 40 guides) |
| | Skill training and engagement in tourist services (2 weeks including on-site training, targets 40 guides) |
| Agencies: | MoHT, MTF (MTGA, etc.) |
| Inputs: | Myanmar: Training rooms (hotels and restaurants), trainers (MHPA, MTHRDA, etc.) |
| | Japan: Technical support for training management, advice provided by experts in specific areas of tourist services |
| Sub-Contract: | None |
| Schedule: | Y1: 1 session, Y2: 2 sessions, Y3: 1 session |
| Cost: | USD 8,000 (for 3 years) |
| | (Trainers' traveling expenses: USD 800, Training room: USD 4,000, Training materials: USD 3,200) |
| Remarks: | Duration of sessions can be flexible depending on needs. The number of sessions can be increased depending on available funding. |

(3) Public Awareness Programs

In order for Bagan to develop tourism in a sustainable manner and contribute to the regional economy, it is absolutely necessary that local residents understand tourism properly. In fact, just a few small gaps were observed between villages receiving tourists and those that don't. The gaps include hospitality (greetings and smiles), proper disposal management and hygiene etc.

Based on the results of the "Survey on perception of tourism among local residents" it is necessary for consolidating the basis of tourism development and promotion in Bagan to disseminate proper understanding of tourism among local residents and their possible participation and benefits in tourism.

In addition, organization of village meetings for those who are involved in tourism or intended to

⁷ At Bagan Language Center of which establishment was supported by a German NGO, around 100 students between 15 and 40s are currently studying English. The students include those who work in tourist services such as hotel employees, horse cart drivers, etc. English courses are composed of 9 levels from Beginner 1 to Pre-Intermediate 3. Among 4 teachers, one is a German volunteer on a 2 month-shift basis. The center has ever organized German and French classes on a temporary basis. In addition, the center started "Guide Training Course (Free Junior Guide)" between mid-May and mid-July for the first trial. 40 students are currently learning 5 days a week.

⁸ Training for upgrading of national licensed guides is not included in the pilot project supported by JICA. The training plans to carry out initiated by Myanmar side.

do so, for example horse cart drivers is also necessary to raise awareness about traffic safety, rules and manners, etc.

Public awareness programs can be useful even for middle and smaller-sized hotels⁹ and restaurants. For example, sensitizing about the importance of 3R (Reduce, Reuse and Recycle), encouraging the use of individual compost for organic vegetables, etc. may be useful for them. In the near future, the surrounding villages and hotels/restaurants in Bagan can make contracts to supply-purchase organic vegetables as a result of using such individual compost. These kind of activities can realize establishment of local supply chains and value chains.

From the same point of view, it would be useful to encourage entrepreneurs among local residents under the public awareness programs.

| Category: | Public Awareness Programs for Local Residents |
|-----------------|--|
| Pilot Projects: | General Public, Horse Cart Drivers, Restaurants, Entrepreneurs |
| Outputs: | Proper understanding of tourism among local residents, positive and responsible participation in tourism |
| Activities: | General public (tourism and improvement of life standards, 1 to 2 days each, targets 1,000 a year) |
| | Horse cart drivers (hospitality and safety, 1 to 2 days each, targets 100 a year) |
| | Restaurants and retails (waste management, etc. 1 to 2 days each, targets 100 a year) |
| | Entrepreneurs, SME, Organic farming, etc. (business support, etc. 1 to 2 days for each, targets 100 a year) |
| Agencies: | GAD, MTF (MHA, MRA, MTGA, etc.) |
| Inputs: | Myanmar: Trainers (GAD, MoHT, MoECAF, etc.) |
| | Japan: Technical support for training management, advice provided by experts |
| Sub-Contract: | None |
| Schedule: | Y1: 2 sessions, Y2: 4 sessions, Y3: 2 sessions |
| Cost: | USD 8,000 (for 3 years) |
| | (Trainers' traveling expenses: USD 800, Training room: USD 4,000, Training materials: USD 3,200) |
| Remarks: | Duration of sessions can be flexible depending on needs. The number of sessions can be increased depending on available funding. |

(4) Quarterly Public-Private Symposium

Opportunity for discussion towards solutions of common issues, exchange of the latest market knowledge among leaders in the tourism administration and tourism industries in Bagan by crossing over barriers, is currently very limited. Opportunity to come in touch with the latest ICT (Information and Communications Technology) is also limited compared to Yangon.

It would be mandatory for leaders involved in tourism development and promotion in Bagan to meet every quarter and share the latest market information by inviting guest speakers of different fields every time. At the same time, the participants in the symposium should discuss

Middle and smaller sized hotels include from 1-star to 3-star hotels and middle-scale hotels without star grade such as Exottismo Travel Group

the future of tourism development and promotion.

Guest speakers can be experts such as: business leaders in the neighboring countries (Thailand, Malaysia, Singapore, etc.) tourism marketing experts of UNWTO or PATA, marketing directors of tourism social network services (SNS) or tourist guide books (Trip Advisor, Lonely Planet, etc.) and others in that category.

Tourism Management Category: Pilot Projects: Quarterly Public-Private Symposium Outputs: Improved tourism management among leaders of both the public and private sectors in Bagan Organization of quarterly symposium by inviting guest speakers (2 persons Activities: each session) from neighboring countries in accordance with the specific topics contributing to tourism development and promotion of Bagan (4 times a year, 1 to 2 days each time, 100 participants each time) Agencies: MoHT, MTF (MHA, MRA, MTGA, etc.) Inputs: Myanmar: Training rooms (hotels and restaurants), Accommodation for guest speakers Japan: Technical support for training management, advice provided by experts Sub-Contract: None Schedule: Y1: 2 sessions, Y2: 4 sessions, Y3: 0 sessions Cost: USD 36,000 (for 3 years) (Trainers' traveling expenses: USD 30,000, Training room: USD 3,000, Training materials: USD 3,000) Remarks: Guest speakers from Myanmar are also invited.

(5) Beginners Training for High School Students

Most of employees in hotels and restaurants in Bagan are not professionals. High school students in Nyaung-U Town and New Bagan Town are considered to be reserves₁₀.

Proper understanding of tourism would be useful for grade 10 and 11 students to be motivated or prepared to participate in tourist services. On top of that, it would be useful when they actually start their jobs in tourist services as they can understand better the initial trainings. It will enable the improvement of the tourism industry and hospitality in Bagan as a whole.

It would be the most efficient way in Bagan, where currently not a single hotel school is established, to teach the students who wish to acquire basic knowledge after school or on weekends or practical tourist services during summer holiday between May and June.

Under the authorization of the Education office in Nyaung-U, MoHT, MHA and MRA Bagan will take the initiative for appointment of lectures and organization of seminars.

¹⁰ Current basic education system in Myanmar comprises 5-year primary, 4-year lower-secondary and 2-year upper-secondary education.

Category: Tourism Classes for High School Students

Pilot Projects: Weekend/Vacation Tourism Seminar for High School Students

Outputs: High school students who are reserves for tourism human resources obtain

proper knowledge on tourism and basic skills for hospitality.

Activities: Weekend (basic knowledge on tourism, targets are students of standard 9 and

10, 10 days a year, 100 students a year)

Vacation (basic course of housekeeping and F&B, targets are students of

standard 9 and 10, 4 weeks period, 100 students a year)

Agencies: MoE, MTF (MHPA, MTHRDA, MHA, MRA, etc.)

Inputs: Myanmar: Trainers (MHA, MHPA, etc.)

Japan: Technical support for training management, advice provided by experts

in specific areas of tourist services

Sub-Contract: None

Schedule: Y1: 1 session, Y2: 1 session, Y3: 1 session

Cost: USD 6,000 (for 3 years)

(Trainers' traveling expenses: USD 3,000, Training room: USD 1,000, Training

materials: USD 2,000)

Remarks: High schools are located in Nyaung-U and New Bagan.

Duration of sessions can be flexible depending on needs. The number of

sessions can be increased depending on available funding.

CHAPTER 8 TOWARDS NEXT STAGE OF THE PROJECT

In this chapter, the implementation framework of next stage of the project was reviewed. The remarks for carrying out of the Project, which were developed based on the results of the surveys and discussions with the stakeholders in Myanmar, were also complied. They shall be subject to finalize in the next stage of the Project.

8.1 Goal and Objectives

8.1.1 Goal

The goal of the next phase of the project (The Pilot Model Project for Regional Tourism Development) is to continue self-sustaining tourism development in Bagan. The experience of tourism development in Bagan will be a model for the other tourism destinations and furthermore, tourism destinations in Myanmar will be well developed.

8.1.2 Objectives

The next phase of the project aims at establishing a pilot model for regional tourism development by compiling effective activities for tourism administration, infrastructure and human resources development through implementing the pilot projects.

8.1.3 Outputs

The next phase of the project is to compile the implementation plan covering the following outputs:

- Effective activities for tourism development in Bagan with respect to administration.
- Key infrastructure for tourism development in Bagan.
- Effective systems for human resource development in the tourism industry.
- An implementation plan for tourism development in Bagan which can be replicated in other regions.

8.1.4 Beneficiaries

(1) Direct Beneficiaries

- MoHT staffs.
- Other government staffs working under the Joint Coordination Committee (JCC) and Working Groups (WG)
- Private sector such as tourism businesses and employees involved with JCC, WG and the pilot projects

(2) Indirect Beneficiaries

- · Tourism businesses in Bagan.
- Tourists in Bagan.
- Local residents in Bagan

8.2 Scope

8.2.1 Overall Framework

The next level of the project will delineate a comprehensive tourism development implementation plan with respect to tourism administration, tourism infrastructure and tourism HRD. This implementation plan will be the model for the tourism plans in the other tourism destinations. In the course of delineating the implementation plan, the pilot projects will be implemented to improve workability of the implementation plan by adopting the experience and discoveries from the pilot projects. The pilot projects are rationalized in the Implementation plan too. The other function anticipated from the pilot projects is to contribute to a self-sustaining tourism development by developing capacity of stakeholders in public and private sectors regarding tourism development in Bagan including MoHT.

Overall framework of the next phase of the project is illustrated in Figure 8.1.

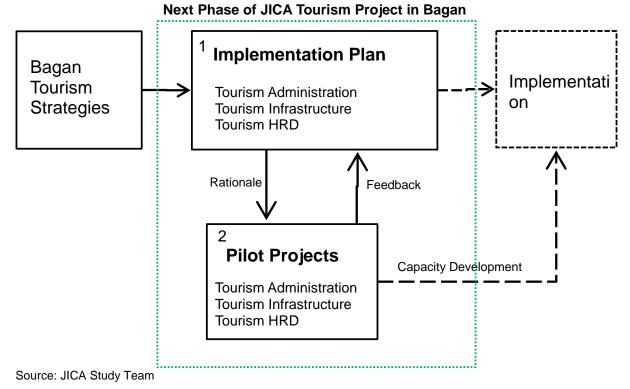


Figure 8.1 Overall Frameworks

8.2.2 Points of Attention for implementing the Next Phase

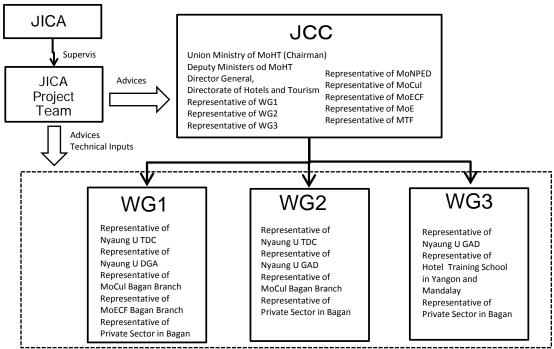
To smoothly implement the next phase of the project, the JICA project team should pay more attention on the following aspects in the course of the project:

- Collaboration of three sectors that is; tourism administration, tourism infrastructure and tourism HRD
- · Joint work with MoHT.
- Closed cooperation with the Ministry of Culture, GA D and TDC.
- · Self-sustaining tourism development by people in Bagan.
- Considerations of registration to UNESCO World Heritage.

8.3 Implementation Structure

The next phase of the project will be implemented with the following organizational structure as shown in Figure 8.2, which was agreed on in the MM dated 4th December 2013.

JCC functions as an overall decision-making and inter-organizational coordinator, which was set-up at Nay Pyi Taw. The chairman of the JCC is the Union Minister of the MoHT with members from MoHT, ministries concerned and private sector. Under the JCC, three (3) of the WG are appointed to Bagan to implement the project, which consists of members from the government organizations concerned and private sectors. The JICA Project Team will provide it with advice and technical inputs while conducting the project. JICA will be a member of the JCC and supervise the JICA Project Team.



Source: Minutes of Meeting between Detailed Planning Survey Team and Authorities Concerned with the Government of The Republic of The Union of Myanmar,4 December 2013. JICA Study Team simplifies figure attached in the MM.

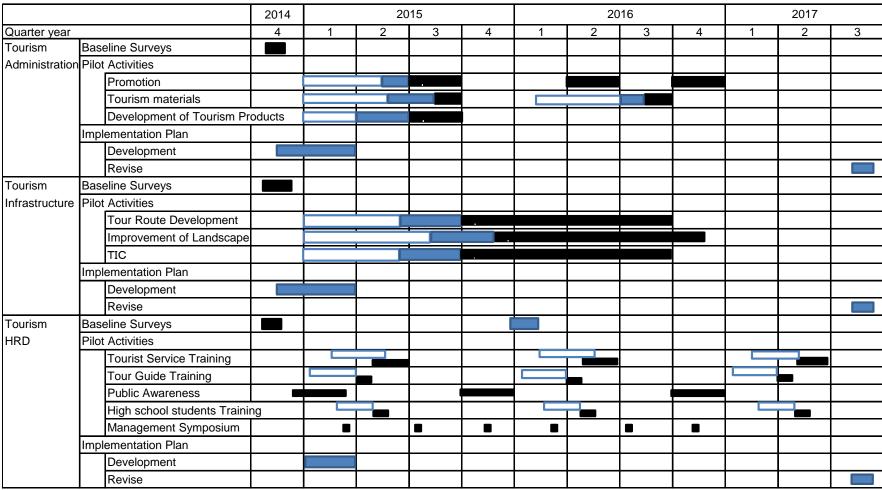
Figure 8.2 Implementation Structure

8.4 Proposed Schedule

Duration of the next phase of the project will be 36 months (3 years).

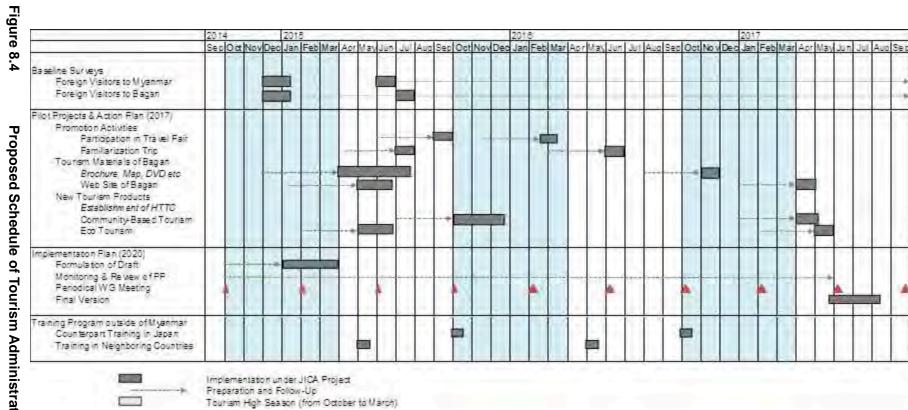
In the first year, the project will concentrate on delineating the implementation plan, selecting the pilot projects and preparing the execution of the pilot projects such as detailed plan, design, tender of contractors etc. Part of the HRD training will commence in the first year. The second year is the period for executing the pilot projects. In the third year, the pilot project will continue to be implemented, and the pilot project will be modified to be more workable, based on the results of the pilot projects.

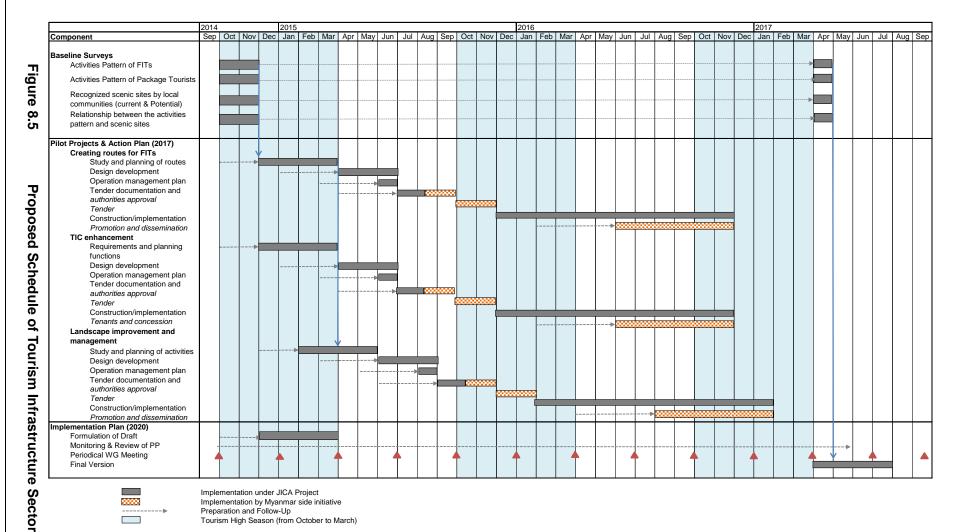
Proposed overall schedule is shown in Figure 8.3, and proposed detailed schedule by sector is shown in Figure 8.4 to Figure 8.6.



Preparation (detailed plan, design etc.) Approval, Tender of Contractor, etc. Execution

Proposed Schedule 으 Tourism **Administration Sector**



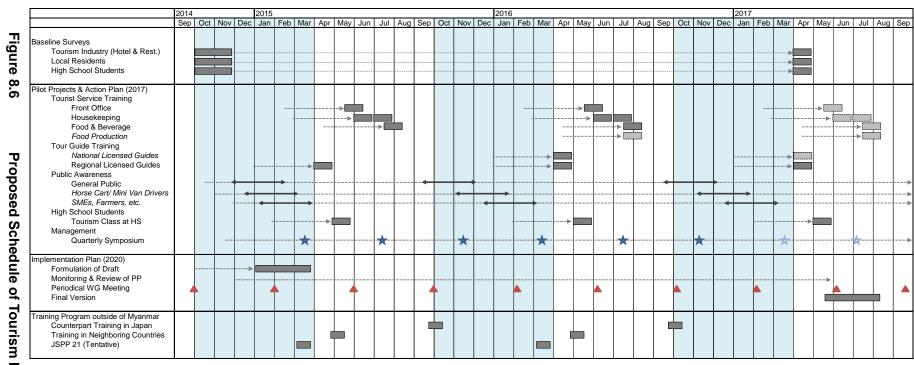


Preparation and Follow-Up

Tourism High Season (from October to March)

8-8





Implementation under JICA Project Implementation by Myanmar Side Initiative Preparation and Follow-Up Tourism High Season (from October to March)

8.5 Inputs from JICA

- JICA Project Team
- Sub-contract Surveys
- Training in Japan and other countries