Ka-Nying Shedrub Ling Monastery

Construction Report 2018

subject: Description of completed and ongoing construction activities from 2015 to 2018.

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This report is a continuation of construction reviews 01 d.d. 9 September 2015, 02 d.d. 9 October 2015, 03 d.d. 19 January 2016 and 04 d.d. 30 September 2016. These reviews were intended to track the construction activities of Ka-Nying monastery for team members and to inform any interested community members. In addition, specific reporting on the structural situation of the different existing buildings was kept in 2016. (For an overview of aspects of the building process and structure in Nepal see review 02.)

In addition masterplan updates and PowerPoint presentations were made from 2015 to 2017 in order to inform the community of planning and construction activities. The first one of these was presented at the fall seminar of 2015, others at smaller gatherings of the international sangha, the last one in fall 2017.

This report will provide a yearly status update for all monastery construction activities, intended for sponsors and more generally for sangha members. Projects under way from the time of the earthquake in April 2015 until now are described in the first report in this format.

Ka-Nying Shedrub Ling Monastery – Boudha

The existing temple of Ka-Nying monastery.
After the earthquake it became clear that the existing temple had been damaged to such an extent that it would not be possible to renovate it – retrofitting is the term used in Nepal – without taking down the entire building and rebuilding it. This situation coincided with the already present plan to build a new, larger shrine hall at the back of the monastery site, in between the six-story monks’ quarters that were under construction at that time. In order to determine a good course of action 6 options were discussed, ranging from keeping and renovating the existing temple, to almost completely clearing the site for a large new temple. After a period of about 1.5 years during which many different stakeholders were consulted – other Rinpoches, senior monks, khenpos and lamas, and a variety of local and international sangha members –, Chökyi Nyima Rinpoche decided that the right course of action would be to take down the existing temple and built a much larger new temple in the centre of the monastery site. This temple will have a capacity of ca. 2,500 people, which is necessary to hold the growing sangha of local – Tibetan and Nepali – practitioners and international students, most notably the growing Chinese sangha.

Masterplan

On the basis of this masterplan a variety of building activities were necessary to prepare the site before the construction of the new temple could start. This was caused both by the change of plan regarding the ongoing construction activities and foremost the effect of the earthquake on the site. The following construction projects are part of this restructuring effort, as part of the overall masterplan. They are described in the order of the time of the start of construction.

**Monks’ Quarters – Eastside**

This 6-story building was being finished at the time of the earthquake. Earthquake damage was limited and repaired by means of cement-grouting injection in cracks in the masonry. Part of the monks’ rooms and classrooms were first taken up in August 2015 by the international centre for Buddhist studies, Rangjung Yeshe Institute, that had to be relocated out of the existing temple building. Monks moved into the rooms in November 2015 and a temporary apartment for Rinpoche was finished as well at that time. Rinpoche used this apartment to stay and receive visitors when staying in the monastery until his new apartment in the Shedra building was finished. In the meantime RYI has relocated to its planned position in the Shedra building.
and the complete building now functions according to plan, housing monks’ rooms, classrooms and a temporary monks’ library.

**East Monks’ quarters (left) and Shedra building (right).**

**Shedra Building**

This 6-story building was under construction during the time of the earthquake, the main concrete structure and masonry on the first 4 floors being in place. Also in this building small repairs were made by cement grouting injection, apart from the top floor structure, which was effected more strongly by the earthquake. Although the entire structure was deemed sufficiently sized in terms of column and beam size, on the top floor a larger scale repair of the columns was necessary because of faulty concreting work. This was done by epoxy grouting injection and re-covering of the columns with micro concrete. In order to plan the further layout of the building a complete set of drawings was made – drawings being non-existent for this structure.

**Monks’ dining hall and kitchen.**

The floors of the building were subsequently finished in recent years, first by using the main hall on the ground floor as a substitute for the existing shrine hall around September after the earthquake, then
constructing Rinpoche’s apartment, which was finished in February 2016. In the process, Rinpoche’s rooms were fitted with double glazed aluminium casement windows. Next, the two floors designated for RYI were re-designed and constructed to fit RYI’s needs more closely, with RYI moving in in June 2017. In order to make the upper floors more easily accessible a staircase to the 1st floor was added at this time and the shrine hall was fitted with marble flooring.

More recently the monks’ dining hall and new, completely stainless steel, kitchen in the basement of the building were – after re-designing and re-structuring the space to receive more light, seat more monks and make the kitchen processes more hygienic and functional – finished in May 2018 and the RYI library was finished and inaugurated in September 2018. At this moment the monks’ dining hall is being fitted with acoustic ceilings similar to the ones installed in RYI classrooms, making this large space more appropriate for the communal teaching sessions of the ca. 200 young monks of the monastery.

Parts of this building keep being improved upon, with the top floor being fitted with a personal library for Rinpoche and the construction of roof gardens on Rinpoche’s apartment floor.

**New Young Monks’ Quarters – North Side**

In the year after the earthquake a large number of new young monks entered the monastery. They are mainly native of the area of the village close to the Tibetan border that was relocated and built with the support of the monastery, and of Dhading district west of Kathmandu where the village was rebuilt (This project was finished in Spring 2017, see Shenpen’s Dhading project for more information). Starting with ca. 80 boys, over the recent period more have regularly come in, bringing the number to ca. 200 young monks total, in the age of 6 to 14 years old. In order to accommodate and teach these young monks it was decided to build 6 classrooms, convert a workshop building under construction into dormitory and add a sanitary building, all located at the back – north – side of the monastery site. This site was given a clear boundary in the form of a covered wall/seating area in order to create a clearly delineated and accommodating living and teaching environment for the young monks, thereby also limiting the inconvenience these roaming boys posed to the older monks. Over the last year the curriculum for the young monks was extended from the traditional monastery teaching into English, mathematics, social and science classes, given by Nepali teachers.
A carpentry workshop was built in the summer of 2017, to facilitate the work on the different ongoing projects, mainly in the monastery itself and in Nagi Gompa. In Nepal good carpenters, who should be available on a continuous basis are difficult to find, therefore this group of carpenters are provided with a place to stay and work, and with machinery, inside the monastery. They produce all woodwork, ranging from windows and doors to furniture.
With the finishing of the new monks' kitchen and dining hall and the workshop, the existing old, shed-like structure in the centre of the site, that was used as both workshop and as a – largely outdoor – kitchen after the existing kitchen became unusable after the earthquake, can be taken down to make way for the construction of the new temple.

**Monks’ Quarters – Westside**

This building – mirroring the East monks’ quarters with 6-stories – had been built in raw form, the concrete structure in place, at the time of the earthquake. Since this building was open to any retrofitting if necessary a detailed analysis and assessment of earthquake stability was undertaken by the Nepali firm of R&R structural engineers. Also here a set of drawings needed to be made, with only limited structural drawings available. From these structural drawings it became apparent that the building was designed for 3 to 4 floors only, but built up to 6 floors. The structural analysis showed that the building did not only not comply with earthquake design guidelines, but also did not stand up to a regular analysis of the load bearing structure. In order to remedy this a retrofit design was proposed by R&R and optimised by the Ka-Nying team.
The execution of the retrofitting started in September 2017 with the long – South – arm of the structure, which was recently finished. Work on the North part started in July 2018. Part of the retrofit is a radical extension and improvement of the foundations, an increase in the size of the columns up to the 5th floor and added sheer walls up to the 2nd floor. The connection between the two arms is cut out, since earthquake guidelines say this is a vulnerable part of the structure. In this corner an existing, badly made, concrete staircase that was damaged by the earthquake is being replaced by a steel one. At this moment rooms for monks are being constructed in the finished part of the retrofitting. Monks are planned to move in the summer of 2019, from the existing rooms in the old part of the monastery, thereby freeing the way to take down the old building. The West monks’ quarters in this form will house up to 160 monks.

Three bays on the South end of the monks’ quarters have not been built yet, a three–story house on the monastery land being in the way to complete this structure to be symmetrical with the East monks’ quarters. This part can be constructed once the RYI restaurant, now housed in this three–story building has been moved (see below).

Remark on structural aspects of the East monks’ quarters.
Since the earthquake analysis for the West monks’ quarters showed that this structure does not comply with regulations it can be assumed that the East monks’ quarters also does not comply, maybe even less so. This means that it is advisable to also retrofit this structure in a similar way in the future. This would mean displacing the ca. 60 monks and all classrooms for at least 1 year, which can only be undertaken if all other parts of the masterplan are in place and will therefore have to wait. One positive aspect is that the concrete column and beam structure here is completely filled with masonry walls that will take up a considerable amount of stress in case of an earthquake, even though these walls are not part of any earthquake analysis on the structure: only the concrete structure is taken into account. This gives the building a certain buffer in resilience against a future earthquake.

Monastery and RYI Restaurant

Performance space between the restaurant – at the back – and the library – to the left.

On the West side of the monastery the ground floor of the three–story house next to the West monks’ quarters was in use as an RYI canteen, both serving lunch and providing space for language partner teams in morning and afternoon sessions. Since this house is in the way of completing the West monks’ quarters the RYI canteen has to be moved. This provided the opportunity to create a new, better equipped and located restaurant that could serve not only as a much needed larger RYI restaurant and language partner space, but that can serve as a place for RYI staff and students, monks and local and international sangha to meet,
connect and exchange experiences, thereby supporting everyone connected to Chökyi Nyima Rinpoche’s activities. For this purpose, a place across the street running on the West side if the monastery was selected, on a larger piece of land belonging to the monastery. The design and construction of the new restaurant started in February 2018 and in November an 'inauguration' lunch was held on the request of Rinpoche for all fall seminar participants. The restaurant is due to open first for RYI staff and students during the next semester and open for all guests in summer 2019. Rinpoche decided to name it Utpala restaurant.

Behind the restaurant an open space can be used for larger RYI and sangha gatherings and performances. Located on the other side of this space is a Tibetan specialised library will be housed where these texts can be studied and translators have to opportunity to meet and work on translations. A specific space for the 84000 translation project will be provided here.

**New Temple**

![The approved design for the new temple.](image)

As a result of the works described above, the monks residing in the old monastery quarters can move to new rooms and the existing monastery with its temple can be taken down, to provide the extra part of the space for the new large temple. This is planned to start in fall 2019. The shrine hall will be ca. 5 1/2 times larger than the existing hall and the temple will have 6 floors. After the masterplan, with the temple in the centre, had been established, the design of the temple itself came about in several stages of discussions with Rinpoche and others. During this process a Lama with knowledge of temple design and decoration – also involved with the Lumbini temple – was regularly consulted. The final design of the appearance of the temple was approved by Rinpoche in spring 2018 and the design has now moved into the lay-out and function of the spaces themselves.

Regarding the taking down of the existing temple, several forays have been made to test the possibility of removing and replacing the murals of the shrine hall. The same is the case for the – more important – three main statues. One possibility is to re–create this shrine hall – including the moved statues and maybe murals – to the west of its present position, where it would balance the setting of the new temple with the Shedra building on the east side. A decision on these issues is pending.
Monastery Garden and Environment Project

Several activities over recent years – started up by Mélanie Letourneau, managing director of Shenpen, Rinpoche’s aid organisation – have begun to target the environmental qualities of the monastery, by introducing the separation and recycling of waste, the production of compost out of kitchen and garden waste and organising clean-up days. Parallel to the construction of the new restaurant a nursery for trees and plants has been developed by one of the monasteries Lopöns, Shedrub Gyamtso, with the intention not only to provide the monastery with – flowering – plants and trees, but also to use these in Nagi Gompa and Parping monasteries and provide them to anyone connected to the monastery. These activities fall within the scope of an announcement that Rinpoche made recently, saying that Buddha was born, reached enlightenment and started teaching in a garden and that therefore a monastery should be like a garden. In this way the monastery will be an example to others in its surroundings and for Rinpoche’s centres around the world. The roof garden on Rinpoche’s floor will serve as a start for the integral use of roof gardens in the monastery masterplan.

Waste separation station, bringing ca. 800 USD in revenue, which is invested again in improving Ka–Nying monasteries environment.

Nursery behind the new restaurant
The temple in its state of construction in spring 2018.

Based on the wishes of Chökyi Nyima Rinpoche’s father, Tulku Urgyen Rinpoche, the construction of a large temple in Lumbini, birthplace of the Buddha and UNESCO world heritage site, started in 2010. This temple has a similar size as the one planned in Boudha and will seat ca. 2,500 people. During its initial phase of construction, the work progressed in a slow tempo due to the lack of funds, but after an appeal from Rinpoche at Tibetan New Year, February 2017, the process was re-invigorated and both funding and construction have continued in a good pace since then.

View from the first floor, overlooking the main shine hall.
At this time the main structure is completed, with most of the decoration work finished. At this moment the outer windows, consisting of wooden frames to create a traditional appearance, with an infill of double-glazed aluminium casement windows are being installed. In the coming months work on the throne for the three main Buddha statues is planned to be completed and work on the structure that will hold the 1000 Buddha statues will start. This feature of the temple cannot be called anything less than a world-class project in its own right, resulting in a – partially curved – wall filled with Buddha statues of 40m (130 feet) long and up to 12m (40 feet) high. At the same time an elevator and air-conditioning – afterthoughts in relation to the overall planning – are being designed and prepared.

Mock-up for the combination of wood and aluminium windows.

**Monks’ and Visitors’ Quarters and Facilities**

Rinpoche’s vision for the Lumbini site is that it should work as a fully functioning monastery, with daily pujas, teaching and study. This in contrast to most of the other monasteries constructed in the Lumbini monastic zone, which seem to function mainly for just visiting more than practice. In order to support a full functioning the design for visitors and monks’ quarters around the temple are being planned, as well as teaching spaces, dining hall and kitchen.

Temple design with auxiliary buildings forming a courtyard around.

Nagi Gompa Nunnery – Shivapuri

Nagi Gompa nunnery, located in Shivapuri National Forest, overlooking Kathmandu valley.

Masterplan

Nagi Gompa nunnery was most strongly affected by the earthquake in 2015: several of the – poorly built – houses collapsed. Luckily no one was killed or even injured, with one older nun rescued from among the debris of her small house. However, almost all of the houses still standing have considerable damage and need to be replaced. In addition, the relatively new, small, temple with three–year retreat rooms was damaged in such a way – its concrete structure not been properly dimensioned – that it had to be taken down. The main temple survived the earthquake quite well.

The rebuilding of the houses and the three–year retreat place, along with other needed accommodation, offers the potential to structure the site more carefully, something that was not done until now, with buildings simply springing up without much planning. In this way a stronger link to the amazing landscape and position of the nunnery in the Shivapuri National park forest, overlooking Kathmandu valley from a height of ca. 2200m altitude can be developed.

Main Nuns’ Quarters

At the time of the earthquake new nun’s quarters in the form of a long 4–story building was under construction, close to being finished. Also this building was designed for 3 floors only, but luckily it withstood the earthquake in a good way. From a point of view of design this building is too massive – too long and too high –, but considering the need for accommodation, especially after the earthquake, the building was finished in its present state in spring 2016, housing ca. 60 nuns and rooms for visiting practitioners. Besides being too large in general the top floor has taken away the free view from the grounds in front of the main temple. In view of the qualities pursued in the masterplan it is thought to be a good course of action to take of this top floor of this building and replace it with a roof garden, opening up the view again. This can be undertaken once other parts of the masterplan are in place.
Part of the structure, at its backside towards the slope, was an underground space unclearly designated for teaching spaces. It was decided to open up the ceiling with skylights, in order to create a space to be used as a new – necessary – dining hall. A new kitchen, with stainless steel equipment and gas cooking, was constructed on an open position to the side of this dining hall. This kitchen is almost finished and will replace the existing kitchen where cooking has taken place in a blackened room with a large wood burning stove up till now.

8 Small Houses

A row of small housing, located next to the pedestrian access path to the nunnery, collapsed during the earthquake. The process of rebuilding these houses started up in the beginning of 2016 and with the help of a team of Austrian volunteers the foundations were completed. Since then the construction efforts in Nagi Gompa went into the main nuns’ building, kitchen and dining hall and only recently the work on the 8 houses was started up again. All wooden window and doors have been prepared and construction is planned to continue from February 2019 onward.
The houses are planned to be made out of bricks recovered from the old structure, and in addition with compressed earth bricks. The latter will create more thermal comfort and are much more environmentally friendly than the usually applied fired bricks, which are made in wood fired kilns in the Kathmandu valley that are known for their contribution to air pollution. The houses are all fitted with a small kitchen unit and a bathroom. A test will be made to introduce solar heating for the rooms in the form of a Trombe wall and a vegetation roof will create both a more stable indoor temperature – in summer and winter – and integrate the building into the landscape.

Section of the small houses, with structural and climatic principles.

Former residents of collapsed or damaged structures will be housed here, thereby creating the opportunity to demolish other – haphazardly built – houses that are still in use. This will have the effect of cleaning up the nunnery of these structures, as well as re-locating the largely non-ordained residents to a more specific and public part of the nunnery.

Young Nuns’ Dormitory

As in the monastery in Boudha, new young nuns have come into the nunnery over the recent years and are housed for now in different locations on the site, partly in the old three-year retreat housing. A new young nuns’ dormitory is planned to start construction in February 2019, with a capacity to sleep 100 young nuns, ranging in the age of 6 to 14, located next to the main nuns’ quarters. This building will be given a vegetation roof as well, to form a more adapted surrounding for the large main building. New classrooms will be planned after this, the curriculum for young nuns now also incorporating English, mathematics, social and science classes.
3-Year Retreat Housing

While three–year retreats were undertaken until the earthquake in the smaller temple building that had to be taken down, two older retreat houses are located at the South, lower, side of the nunnery. This place is removed from the activities in the nunnery and is thought to be a good position for a rebuilding of a three–year retreat facility. Plans for this have been made and construction will start after the young nuns’ dormitory has been completed.

In general, it is part of the masterplan to use solar electricity and solar hot water for all buildings in order to make the nunnery as self–sufficient as possible. In addition to this, nuns have been growing vegetables at different places in the nunnery, and this can be developed in more organised way.

See for more information on the Nagi Gompa project: Nagi Gompa Nunnery - construction activities 01 – 10 March 2016.
Asura Cave monastery – Pharping

Smaller improvements have taken place at the Pharbing monastery, mainly on creating more comfortable rooms and increasing the amount and quality of toilets and bathrooms. In summer 2018 more specific plans were started up to improve the circulation around the cave and possibly integrate a larger shrine–hall into these plans. For now these are under discussion.

New Access Road and Forest Replanting

In spring 2017 a new access road and improved parking space was made together with local authorities and residents. New infrastructure for water was also prepared at this time. For the monastery, working together with the local community is an important part to safeguard the functioning of the monastery, as it is located up against a steep hillside next to a dense village settlement. The same is true for forest authorities, with which the monastery has the obligation to upkeep the forest it is located in. For this purpose, a tree planting project was executed in spring 2018.

Small Monastery – Hetauda

This monastery is a small affiliate of Ka–Nying Shedrub Ling, located at the edge of the hills and the Terai plains on the outskirts of the town of Hetauda, one of Nepal’s larger towns. On the site a small one-story temple was in the process of being extended by the former caretaker into a 4-story structure. However, this topping up being done on a simple masonry structure led to the severe dislocation of the new upper 3-story concrete structure by the earthquake. When the monastery was visited after the earthquake this structure turned out to be on the verge of collapse, with no easy way to take it down. In the meantime, a contractor was found who wanted to take on the demolition and this was completed in spring 2018.

In the monastery mainly young nuns – coming from local villages affected by the earthquake – are lodged and educated. In order to facilitate this, new classrooms are planned, a three-story dormitory building at the back of the site having survived the earthquake in good order. The idea is to set up an exchange program with Nagi Gompa nunnery to improve the quality of the education here.

Monks and nuns discussing the future classrooms, to be built on the left after the existing temple was taken down.