



5th Earth Architecture Competition

# DESIGNING A RURAL ARTS CENTER FOR SENEGAL

CASAMANCE REGION

DESIGN BRIEF

Nka Foundation announces a call for entries for its 5th Earth Architecture Competition: Designing a Rural Arts Center for Senegal, an international architecture competition open to professionals and students of architecture, design, urban planning and others from around the world. Your challenge is to design a unit of a rural arts school for construction in a village in the Casamance region of Senegal.

## OBJECTIVE

The objective is to design a modern mud type to be built as a unit of an artisanal village, a residential vocational training center for unemployed rural youths of ages 16 to 25 years to undergo a 2-year skills development training in the vocational arts and design. We want the school plan to emphasize sustainable architecture and cost efficient construction. Thus, we want the buildings to fully integrate earth architecture and passive solar design.

The challenge is to design one of the following types for the school: a classroom type, cafeteria type, office building type, dormitory type, group toilet type, cafeteria type, dwelling type for the local teachers, and guest house type for our international visiting staff. Contestants are to design the school type for construction by maximum use of earth and local labor.

The construction site will be Diakounda village in Sédhiou Region of the Casamance in Senegal.

## IMPORTANT DATES

### REGISTRATION

Jul 13 - 31 (Early Bird)

Aug 1 - Oct 13 (Standard)

### ENTRY SUBMISSION

Oct 16-19

### JUDGING

Oct 24 - Nov 2

### WINNER ANNOUNCEMENT

Nov 13

Building Workshops to Realize  
the Top 40 Design Entries

Feb 2018 - Jul 2020

The jurors will use judging criteria involving form, function and technical issues to select three prize-winning designs. Specifically, the jurors will award prizes for first, second and third place consisting of a commemorative certificate and cash prizes to the winning designs.

The jurors will use judging criteria involving form, function and technical issues to select three prize-winning designs. Specifically, the jurors will award prizes for first, second and third place consisting of a commemorative certificate and cash prizes to the winning designs as follows: 1st prize - \$1,000 or construction of design in Senegal plus a trip to Senegal for a workshop to build the winning design (in case the winner does not reside in Senegal and to a maximum of 1 person); 2nd prize- Construction or \$700 and 3rd prize- Construction or \$400. Honorable mentions will be awarded. Every design team that makes the Top 40 Entries shortlist will be offered the opportunity to build their design in Senegal or Gambia in collaboration with the project organizers.

Take the design-build challenge! Make your name known!  
Let's create change where it is most needed.

## IMPORTANT NOTES

Total costs of constructing the design entry must not exceed US \$10,000 for materials and local labor.

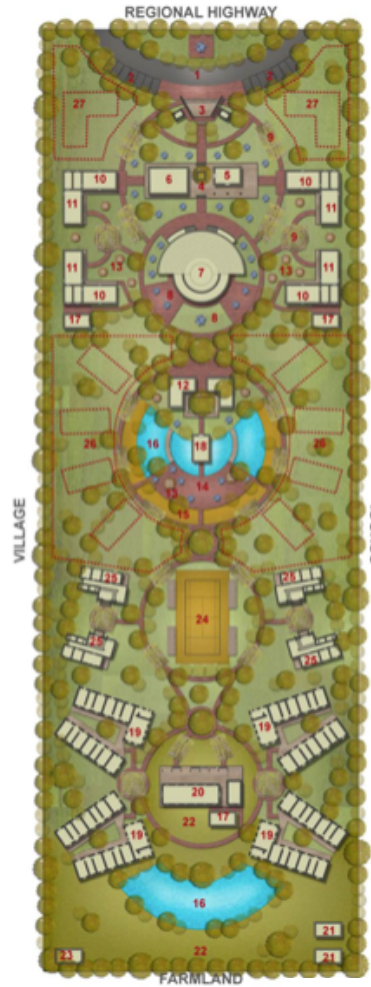
Entry fee  
\$40 for individual  
\$60 for team entry

1st Prize \$1,000  
2nd Prize \$700  
3rd Prize \$400  
Honorable Mentions

Register at  
<http://goo.gl/hSuuQO>

Submit design entry  
<http://nkaprojects.boards.net>

Proposed Site Plan for the Diakounda Arts Village  
 by Podjamas Chaisuraphawat,  
 an Architect & Urban Planner in Thailand



## SITE PLAN

AREA 30,000 SQ.M.  
 18.75 RAI



- 1 - ROAD
- 2 - PARKING
- 3 - GATE
- 4 - MAIN LOBBY
- 5 - SHOP
- 6 - ADMIN OFFICE
- 7 - THEATER (500 SEATS)
- 8 - OUTDOOR EXHIBITION
- 9 - PERGOLA
- 10 - CLASSROOM
- 11 - WORKSHOP
- 12 - COMMUNITY LIBRARY
- 13 - PAVILLION
- 14- MULTIPURPOSE AREA
- 15- OBSTACLE COURSE
- 16 - POND
- 17 - TOILET
- 18- CHURCH
- 19 -DORMITORY
- 20- DINING & KITCHEN
- 21- STABLE
- 22 - DEMONSTRATION FARM
- 23 - STORAGE
- 24- VOLLEYBALL COURT
- 25 - GUESTHOUSE
- 26 - FUTURE DEVELOPMENT  
(for guesthouse project)
- 27 - FUTURE DEVELOPMENT  
(for studyroom)

0 5 m 20 m 50 m

# HOW TO DESIGN WHAT IS BUILDABLE?

The construction of the top design entries in the competition is our priority for two reasons: (1) The building workshop will serve as cultural exchange as you build your unit of the school with the local youth trainees and local artisans; and (2) because at Nka Foundation, we have come to know that a means for a young designer to learn to design what is buildable is by providing you with the opportunity to design and build your own design. Thus, from February 2018 to July 2020, we will be collaborating with some of the design teams in the competition to organize construction workshops to build their design entries based on site at Diakounda village in Sédhiou Region of the Casamance, Senegal.

The competition promotes open source design, which implies that the submitted designs will be available for all to appreciate, use, or improve them to generate more practical and contemporary design solutions for the region. In light of this, the competition entry needs to be a type that can be replicated in another village in tropical Africa such as Gambia, Ghana or Tanzania. Our long-term goal is to enable the rural population and lots of other places, to overcome the stigma that mud architecture is architecture for the very poor.

## CONSTRUCTION METHOD

What is the preferred construction method for the winning entries? The method to be used to build your design can be poured earth, rammed earth or another earth construction technique such as mud bricks. Mud brick construction is common to the region. Roof design should involve metal roof with such as corrugated zinc or aluminum roofing sheets, which are the conventional roofing materials in the region. Other roofing methods such as vault roof, tiled stone, ferro-cement roof and canvas roof are all possibilities but not duly tested to stand the region's rain storms. However, keep in mind that we are designing for the tropical climate; devices such as natural ventilation, setting the house foundation at two feet above the ground level, and designing the roof to overhang by at least three feet will therefore be in order.

# CONSTRUCTION SITE

Keep in mind that the construction site for your design is Diakounda village at Bounkiling in Sédhiou Region of the Casamance, Senegal. The site is off the highway from Ziguinchor to Dakar via the Gambia. The official language is French, but the major language group is the Mandingo. Other language groups are the Diola and Wolof. Diakounda is a rural community dotted with mud houses of the mud brick type, roofed with corrugated zinc sheets. The main religion is Islam and the primary occupation of the people is farming. The closest airport to Diakounda is the Ziguinchor Airport.

The Sédhiou Region is located in the South-West of the country in the natural region called Casamance. Sédhiou is at the center of Casamance between the Kolda Region in the East and the Ziguinchor Region in the West. It also shares borders with the Gambia in the North and Guinea Bissau in the South. The Casamance River runs through the region. Sédhiou is one of the wettest regions of Senegal. The climate is tropical, hot and humid with a rainy season from May to November and a dry season from December to April. The environment is conducive to rice production. The poverty threshold is high. Sédhiou also suffers from a serious lack of basic infrastructure.

## IMAGE INSPIRATION

Photos of the Construction Site  
<https://yadi.sk/d/kNmt1ohQ3GYhXw>

Examples of Dome Design  
<https://yadi.sk/d/mbiKhWGB3EFKJS>

# ORGANIZER

Nka Foundation is a nonprofit organization in the United States that exists to serve underserved communities in Africa through use of the arts and design education. The works of Nka Foundation began in 2005. From 2008 through 2010, Nka organized workshops and symposia in partnerships with some universities in Ghana and Mali to stimulate conversations and artistic interventions for solutions to the problem of tapping of the abundant local resources for sustainable development in sub-Saharan Africa. By 2009, we felt a deep need to create a model arts village at Abetenim that can be replicated in other parts of Africa, to continue to address the problem through design-build workshops, arts workshops, design competitions and outreach to the local community by means of school building projects and education enrichment.

From October 2012 to October 2013, we organized 10x10 Shelter Challenge, which was a design-build challenge based on site at Abetenim in Ghana, and two architectural projects were successfully built from that initiative. In 2014, Nka organized, Mud House Design 2014: Reinventing the African Mud Hut Together and seven projects have been built from the design-build competition. In 2015, we organized 3rd Earth Architecture Competition: Designing for the Arts in Ghana. So far, one project has been realized at Abetenim from the competition, and another is underway. The next one was the 4th Earth Architecture Competition: Designing a School for Ghana. Along the design-build competitions, Nka Foundation

## CONDITIONS OF PARTICIPATION

(1) An individual or a design team can submit an entry to the 5th Earth Architecture Competition. Each team shall identify one team member as its Point of Contact ("Point of Contact") during the submission process. Each entry shall receive a registration number and, from then on, will only be identified by that number, in order to keep anonymity during the submission and the final election.

(2) In order to enter the design contest, you must register here: <http://goo.gl/hSuuQO>. On your Eventbrite ticket, you will see a 9-digit order #. This is your registration number for one design entry. If you are submitting more than one entry, each design entry requires a separate ticket. With your entry ticket number upload your design entry to the competition board: <http://nkaprojects.boards.net/thread/68/submitted-entries> on October 16, 2017. If you want to pay by check, send us an e-mail at [info@nkafoundation.org](mailto:info@nkafoundation.org) / [www.nkafoundation.org](http://www.nkafoundation.org) and the following information: team name, team leader name, phone number and email address. To submit your design, place your ticket number and the title of the project (no name) on all pages of your design submission to allow the jury to select blindly.

(3) SUBMISSION FORMAT: Submission will be Online, to be uploaded to <http://nkaprojects.boards.net/thread/68/submitted-entries>. It should include: (1) The

has hosted some invited projects from design firms and individual practitioners to realized school structures involving libraries, cafeteria and classrooms. Today, Nka Foundation project sites include:

**SINGIDA ARTS VILLAGE**

Singida Municipal, Singida Region, Tanzania

**SANG ARTS VILLAGE**

Mion District, Northern Region, Ghana

**ABETENIM ARTS VILLAGE**

Ejisu-Juaben District, Ashanti Region, Ghana

**DIAKOUNDA ARTS VILLAGE**

Boukiling, Sédhiou Region, Casamance, Senegal

**KANTORA ARTS VILLAGE**

Kassi Kunda, Upper River Region, Gambia

The arts village is designed as a learning center with focus on skills development training in the vocational arts and design to provide relational spaces for creative people from the region and other countries to live, work, learn and create. Nka's rural projects draw on asset-based approach to community development by immersion in the community and by the mobilization of the existing, but often unrecognized abundant local resources to enable the underserved community drive its own development process.

Specifically, throughout the year and at different sites, Nka runs earth architecture workshops and arts projects that invite university students, graduates and others from around the

design statement (200 words max) should include the meaning of the work, material description and budget in USD; and (2) One A1 presentation board submitted as a JPG file of high resolution (1 MB). The upper right corner of the board must contain the entry ticket number. There should not be any marks or any other form of identification, less the entry is disqualified. The file must be named after the ticket number. For example, 112334567.jpg (for your presentation board). Submissions must be in English language.

(4) Of the nominated projects (40), there will be three winning projects, according to the highest scores. Jurors will award prizes for first, second and third place consisting of a commemorative certificate and cash prizes (or travel prizes) to the winning designs as follows: 1st prize- \$1,000 or Construction of design in Senegal plus a trip to Senegal for a workshop to build the winning design (in case the winner does not reside in Senegal and to a maximum of 1 person); 2nd prize- Construction or \$700 and 3rd prize- Construction or \$400. Honorable mentions will be awarded by the jury but will receive no cash prize. Every design team that makes the Top 40 Entries shortlist will be offered the opportunity to build their design in Senegal in collaboration with the project organizers. If a design team of the shortlisted entries is not able to lead the workshop, the team may nominate a practitioner or an organization who is able to lead the workshop to build their entry. Otherwise, the organizers of the



world to immerse in the local culture and learn-by-interaction with the people through the onsite projects. Students can use the opportunity for internship, thesis or personal research.

Take the design challenge! We are inviting projects from individuals, school teams and organizations who find substance in what we are doing. Since 2010, we have collaborated with architecture and design practitioners from around the world to enable their projects, from idea to reality, based on site in rural Ghana and Tanzania. To Nka, designing is not the whole thing. The design education question rather is: How do you learn to design what is buildable? It is by designing and building a project! Nka Foundation has come to know that by immersing the young designers in the full circle of designing and building their design, at the completion of the design-build process, the emerging professionals will learn to design what is buildable to make a well-rounded graduate. For the young professional, you will find the hands-on construction experience a pause from your office work to rediscover the rudiments of design and nuances that can refresh your practice.

contest will pass the opportunity to another team whose entry in the competition is a good fit for the project site.

(5) Judging criteria involve: (1) Form: Visual appearance through use of materials, shape, color, texture, etc; (2) Function as a sustainable house design; and (3) Technical issues to the degree the design addresses construction techniques, climatic factors and construction budget. Decisions of the jury will be final and binding.

(6) Q&A: Registered participants may post questions for organizer to respond to and they can share materials on the competition discussion board: <http://nkaprojects.boards.net>. The deadline for questions is September 30, 2017.

(7) Any person entering this contest shall certify and guarantee the organizers that he/she is the sole author of the project and by participating, each contestant grants their free and exclusive consent that all designs and ideas will be published and shared to inspire others. By entering the competition, all participants agree to all the conditions of participation in the competition.

(8) After, you have uploaded your entry Online, send us a note via email to [info@nkafoundation.org](mailto:info@nkafoundation.org) / [www.nkafoundation.org](http://www.nkafoundation.org) that includes the following information: the entrant's personal information including your name, registration number, profession, address, and email address.

# ART VILLAGE CONCEPT

The arts village is conceived as an informal school, an artisanal vocational development center that brings together international workshop participants, local artisans and less privileged youths from the region for skills transfer. The training will be provided by resident teachers and by hosting guest projects by both international and local practitioners in a self-growing school complex. That means, in the beginning there are just a few buildings. After the students learned some construction techniques, they will test their acquired knowledge and skills by building the next part of the school or some functional buildings for the community. Thus, the students are challenged to solve real problems, work together, to learn and build



- |                         |                        |                        |
|-------------------------|------------------------|------------------------|
| 1 - MAIN ENTRANCE       | 8 - OUTDOOR EXHIBITION | 14- DINING & KITCHEN   |
| 2 - ROAD                | 9 - PERGOLA            | 15 - DORMITORY         |
| 3 - PARKING             | 10 - WORKSHOP          | 16 - DORMITORY         |
| 4 - MAIN LOBBY          | 11 - CLASSROOM         | 17- DEMONSTRATION FARM |
| 5 - SHOP                | 12 - COMMUNITY LIBRARY | 18 - POND              |
| 6- ADMIN OFFICE         | 13- CHURCH             | 19- FUTURE DEVELOPMENT |
| 7 - THEATER (500 SEATS) |                        |                        |

Propose Site Plan for Sang Arts Village, Ghana  
by Podjamas Chairuraphawat, an Architect & Urban Planner in Thailand

and create. Upon graduation, the cohort of trainees can move on to work on commissions as a building cooperative or work individually to source and building houses. Some of the graduates will be offered employment as teachers of the next generation who join the Workshop School.

Specifically, the arts village will be a residential skills learning center of a self-sustaining type for replication in other parts of Africa. The construction of the arts village will be carried out in phases to include accommodation for students, staff and international visitors; a multipurpose hall that serves as a kitchen and presentation hall; a commercial center; classrooms such as metalshop, woodshop, fabricshop and earth construction studio; and a demonstration farm. For example, the demonstration farm would be of the subsistent

type to grow fruit trees, crops and animals such as bees, chicken and goats for use by the school. We want to plant fruit trees such as orange, mango, palm, cashew, coconut, cashew, and flowering plants around each building for shade as a part of the landscaping.

## **THE TRAINING FRAMEWORK**

This is a two-year vocational training program that draws on apprenticeship with local artisans, and learning-by-doing with professional architects and designers, engineers, university students and volunteers who come from around the world to participate in Nka Foundation projects. The program is designed as an informal educational programme which combines literacy training with livelihood skills development to empower educationally

disadvantaged people with livelihood and enterprise skills training so that trainees can engage in income generating vocation. The arts village brings together a cohort of students who come from villages, rural townships and underserved parts of the city in the region to live together and learn-by-doing on construction projects involving building with earth, concrete and wood construction. The course include basic design, entrepreneurial skills, rural house building materials production, various house wall construction methods, roof design and landscaping. The house wall construction methods involves cast earth, rammed earth, mud brick, stone masonry and cob construction. The students will also gain introductory knowledge in other areas such as use of English language, engineering and agroforestry as the school hosts

guest projects by both international and local practitioners. You have a solution? Join us to design, build and run the school!

## **PROGRAMMATIC AREAS**

- Fashion Design and Production: Weaving, batik and sewing for local and international fashion markets.
- Theatre Performance, Video Arts and Filmmaking
- Art Studio (sculpture, painting, etc)
- Building Arts (mud house design, construction and landscaping).

## **OUR WISHLIST OF PROGRAMMATIC UNITS**

- 4 Dormitory Buildings for 25 students per dorm
- Chapel Building for worship
- The Dome (performing arts space that sits 500 people- for performances, conferences and art exhibitions) See: <https://yadi.sk/d/mbiKhWGB3EFKJS> as a source of

inspiration

- Dwelling Type for international visiting staff
- Cafeteria with eating area for 100 people
- Commercial Center (gift shop, offices, and market stalls)
- 4 Classrooms which are woodshop, metalshop, fabricshop, earth construction studio
- Community Library (with media arts room/digital lab)
- Demonstration Farm (to grow fruit trees, crops and animals such as bees, chicken and goats for use by the school).
- Fruticetum

## **FRUTICETUM WALK / SCULPTURE PARK**

A journey rather than a destination, the fruticetum will be integrated with arts village and will showcase different planting character throughout, dotted with sculptures in manner of open-air sculpture

park. Our concept of fruticetum walk involves a landscape beautification project to make the arts village more aesthetically pleasing by landscaping with local rare species and foreign tropical plants in line with our idea of a fruticetum. The arts village site planning will include a fruticetum that will be spread over the entire school. The fruticetum is an outdoor biology classroom that portrays the trees and shrubs of native and foreign, hardy and half-hardy, pictorially and botanically delineated, and scientifically and popularly described; with their propagation, culture, management, and uses in the arts, in useful and ornamental plantations, and in landscape-gardening; preceded by a historical and geographical outline of the trees and shrubs of tropical climates throughout the world.

The focus is on creating a fruticetum in line with the arts

village's natural and the cultural landscape. Elaboration projects may therefore involve components such as aquascape (rain gardens, fish pond, fountain), entrance gate, pathways, playground, renewable energy production, erosion control system, yards (front, back or side yard of a building) or an organic farm. By fruticetum walk, we imply that the visitor would walk through the entrance gate to experience the aesthetics of

- (1) Walkways and foot paths;
- (2) Alternatives for thermal comfort of buildings such as trellises, pergolas and placement of fruit trees to provide shade;
- (3) Sculpture Trail: Outdoor sculptures in earth, wood and metal (an open air art gallery);
- (4) A Demonstration Farm for example (chicken for eggs, vegetable garden and edible fruit trees);
- (5) etc.

## MEDIA PARTNERS



Dachverband Lehm e.V.

## ORGANIZED BY NKA FOUNDATIONS



*Serving the Underserved Communities*  
[www.nkafoundation.org](http://www.nkafoundation.org)  
[info@nkafoundation.org](mailto:info@nkafoundation.org)

POSTAL ADDRESS: 2633 SW 92nd Okalahoma City, OK 73159