Highlights of the 7th Belt and Road Teenager Maker Camp & Teacher Workshop (China-Arab Regional Project)

I. Magical Wonder - Straw Checkerboards

Experience the world-renowned "Straw Checkerboard-based Integrated Sand Control and Protection System". Here, you will have firsthand experience of the remarkable achievements in sand control through the application of straw checkerboards and contribute to the ecological environment management in our hometown by widely promoting its use. Let's contribute our efforts to the advancement of green innovation and development.

Activities:

1. Experience building "straw checkerboards" and learn sand control techniques.

2. Visit the exhibition showcasing the technological achievements in sand control and appreciate the arduous process and successful outcomes in desert management.



II. Go into the Sea of Sand and Home of the Stars

Ningxia is renowned as the "Homeland of Stars", thanks to its unique geographical location and natural advantages. Try to relax and get closer to the nature to experience the enchanting beauty of the starry sky. Let's this wonderful moment together and further foster our friendship.

Activities:

1. Organize stargazing activities when night falls and feel the awe-inspiring charm of stargazing in the desert.

2. Attend a starry-sky sharing session to learn about popular science knowledge related to astronomy.

3. Explore the mysteries of the night sky using astronomical telescopes amidst the desert landscape.

4. Capture memorable photos against the backdrop of the starry sky and experience the commitment of Ningxia to green development and the exploration of celestial wonders.



III. Technological Exploration: Water Balance Monitoring System in Sandy Areas

As the only large-scale weighing lysimeter group in China's sandy areas, this system simulates precipitation and groundwater levels in different climatic zones of the northern sand regions. It explores the processes of desert precipitation, soil water dynamics, and plant growth, facilitating research on the interdisciplinary integration of hydrology, ecology, and biogeochemical cycle.

Activities:

1. Visit China's largest scientific research and observation base for water balance.

2. Organize field surveys to study the spatial distribution patterns of soil moisture and vegetation in desert ecosystems.

3. Visit the demonstration area for artificial cyanobacteria crusts and experimental fields for biogenic soil crusts, observing innovative techniques for sand fixation and the restoration of desertification land.



IV. "Desert Green Energy": New Model of Photovoltaic Power Generation

Endless shifting sand dunes stretch into the distance, and from afar, the ever-expanding desert is transforming into a blue "photovoltaic sea". Experience the optimized industrial layout of desert photovoltaic power plants, which has promoted the development of clean energy, provided new ideas for desert ecological governance, and achieved a "win-win" situation for environmental protection.

Activities:

During the journey, you will witness the exploration of a new model of integrated forest-sand industry, where photovoltaic power generation utilizes climate resources such as sunlight and wind to create a harmonious combination of light, forests, and grasses in the Shapotou region.



V. Cultural Exploration Tour - Ningxia Water Conservancy Museum

The Ningxia Water Conservancy Museum comprehensively showcases the development history of over two thousand years of irrigation from the Yellow River in Ningxia, as well as the significance of rational water management and important water projects. It interprets the essence of Ningxia's prosperity originating from the Yellow River and the inclusive virtues of benevolence, as reflected in traditional Chinese culture.

Activities:

1. Visit the Ningxia Water Conservancy Museum to gain insight into the splendid culture of the ancient Ningxia Yellow River irrigation area that spans thousands of years.

2. Get a close interpretation of the development and evolution of water conservancy in Ningxia, and experience the historical and cultural significance of water in Ningxia.



VI. Majestic Helan, Enchanting Ningxia - Exploring Helan Mountain Rock Art Site and Han Meilin Art Museum

The majestic and towering Helan Mountain, through the vicissitudes of time, safeguards the land with its magnificent presence. Venture into the Helan Mountain Rock Art Site and Han Meiling Art Museum to feel the charm of ancient art, the preservation of rock paintings, and the evolution of cultural and artistic expressions.

Activities:

1. Explore the Helan Mountain Rock Art Site, a world rock art gallery, and marvel at the collection of rock art images, records, and artworks from over 60 countries and regions. Experience the cultural allure brought by ancient rock paintings.

2. Visit the Han Meilin Art Museum and appreciate the works of Han Meilin, who draws inspiration from rock art. Witness the spark that arises from the fusion of ancient human civilization and contemporary wisdom.



VII. Model of Ecological Agriculture - Rice-Fish Space

Ningxia Rice-Fish Spatial Ecological Leisure and Sightseeing Park is an ecological and leisure tourism park where rice protects crabs, crabs eat grass, ducks eat snails, fish eat crabs, and the fish and crab waste fertilize the fields. It presents a picturesque scene of agricultural cultivation, reminiscent of the famous painting "Along the River During the Qingming Festival." Experience the hard work involved in agriculture, witness modern farming techniques, and observe the machinery used for cultivation, planting, and harvesting. **Activities:**

Visit the Rice-Fish Spatial Ecological Leisure and Sightseeing Park, and immerse yourself in the natural and rural landscapes of agriculture.



VIII. Beyond the Limits of the Moon - Mid-Autumn Festival Special Activity

By dressing in Hanfu (traditional Chinese clothing), enjoying tea and snacks, and making palace lanterns, you will gain insights into China's rich culture and history. Experience the joy and warmth of the Mid-Autumn Festival, and hopefully you might be able to more appreciate our excellent traditional culture.

Activities:

1. Discover the origin and stories of the traditional Chinese festival - Mid-Autumn Festival.

2. Moon appreciation in the desert and learn about lunar phases.

3. Dressing in traditional Chinese attire, admiring the moon, tasting mooncakes, and crafting exquisite palace lanterns using mortise and tenon technique.



IX. Ningxia Science and Technology Museum

Ningxia Science and Technology Museum is the only modern science promotion and education venue in the region that integrates science exhibitions, scientific training, science film screenings, science lectures, and youth science education activities. It is responsible for promoting the scientific spirit, popularizing scientific knowledge, and enhancing the scientific literacy of the public in the region. It also plays an important role in implementing the strategies of promoting science and education, talent cultivation, and driving forward innovation-led development.

Activities:

1. Visit the permanent exhibition halls and the Ningxia East-West Science and Technology Cooperation Achievements Exhibition at the China-Arab States Expo.

2. Watch dome films with special effects and promotional videos for Ningxia East-West Science and Technology Cooperation at the China-Arab States Expo.

3. Participate in science and technology innovation exchange and experience classes and science popularization activities.

