

# RECOGNISING MUSLIM HERITAGE

*Professor Salim T S Al-Hassani of the University of Manchester and Chairman of the UK's Foundation for Science, Technology & Civilisation, gave a lecture at the King Faisal Centre for Research and Islamic Studies on 27 March on "1000 Years of Industry Missing from History". With his kind permission, following are extracts from the lecture.*

## Introduction

A typical university graduate grows up with the notion that industrial production, or manufacturing is a Western manifestation, dating from the mid late 18<sup>th</sup> century. This implies, that there was no industry until the English industrial Revolution of the mid 18<sup>th</sup>-19<sup>th</sup> century initiated the birth and development of manufacturing and mass production. In fact,

(i) Industrial production, manufacturing, and mass production for vast urban populations and export, relying on machinery powered by wind and water, had existed nearly ten centuries before the 18<sup>th</sup> century English Industrial revolution,

(ii) Metals were melted in huge quantities, in the Muslim world, for local and foreign markets,

(iii) Textiles were produced, from China to Muslim Spain, in ways not so much dissimilar from methods we have today,

(iv) Such products were not bartered but sold in exchange of cash, or paid for by cheques honoured and valued across Asia, Africa, and Southern Europe, and

(v) Capital was invested and reinvested across vast domains according to lines and mechanisms corresponding to our modern methods.

For example, just during the Abbasid Caliphate, manufactures of every kind were encouraged and fostered in Iraq and many other lands. Glass and soap were made in the factories of Basra. Paper was made in Egypt. Persia



was noted for her gold and embroidery work. High class fabrics including satin brocade, silk and carpets were manufactured in Islamic domains and were in great demand all over the world. The chemical research in Jundeshapur, possibly the oldest observatory and college of natural sciences, led to the knowledge of sugar refining which was successfully applied to sugar industry in Khuzistan and later on in Spain. Besides being famous for its manufacture of Damascus steel swords, Syria was also known for its glass where, as early as the 9<sup>th</sup> century, parti-coloured and enamelled glass was produced. The commodities exported during Abbasid Caliphate were agricultural produce, glass, hardware, silk, textiles, perfumes of all kinds, rose water, saffron, syrup, oil, etc. Under Islam, Spain became very prosperous due to wide ranging industries and large-scale production with revenues from commercial duties exceeding the combined revenues of all Christian states of Europe. The Muslims converted the barren lands of Spain into a garden and set a vast agriculture industry

The focus on this issue is to alert communities as to the particular significance of the Muslim civilisation and its historical role in giving birth to much of modern science and technology.

## Richness of industrial production during the "Dark Ages"

During 700-1700 CE, Muslim industrial production varied from mineral extraction to the production of goods through complex processes (manufacturing of paper for instance).

A brief overview of some randomly picked aspects of Muslim industrial production:

### Steel

The steel industry of Toledo (Spain) was founded by the Muslims. The metalworkers of Islam made bronze, brass, or copper lamps, ewers, bowls, jugs, mugs,

