# Kashmir Economic Review

## Exploring the Historical Development of Kashmiri Shawl Industry and Future Prospects of the Industry

### ABSTRACT

Throughout history, the shawl industry has been one of the most important industries in Jammu and Kashmir. It is not only culturally significant but has also been a major source of exports and employment. It is well-established and recognized that the shawl industry is declining, which has aggravated in recent years. This study aimed to explore the importance of foreign trade for the development of the shawl industry, the reasons behind the decline, and its future prospect. For this study, to understand the prospects of the industry, exports data from 1995-2017 was forecasted using ARIMA for the next 10 years. Using trade statistics, the present study has demonstrated that foreign trade has historically played a vital role in the development of the shawl industry, and its decline is rooted in the conflict and low investment spiral, which decreases its productivity and hence its competitiveness. Moreover, the study has also shown that the industry's prospects are negative, as shown by the point forecast decline. Future studies are needed to explore the relationship between the growth of the shawl industry and NSDP or employment rate in Kashmir, which can provide key insights for understanding the economy of Kashmir

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# 1. INTRODUCTION

There are two dominant understandings of the existence, role, and nature of traditional industries, such as handicraft industries, in economic literature. One position argues that handicraft industries continue to exist primarily due to state intervention (Richards, 1979; Jain, 1985), while another position argues that it is flexible nature and continuing aesthetic appeal which explains the survival of handicraft industries (Kautsky, 1984; Mukund & Syamasundari, 1998; Berg, 2014). Though both views differ on the reason behind the existence of traditional industries, there exists scholarly consensus on the essential role these industries play in employing the rural economy and in the production of exportable commodities. Handicraft also plays a vital role in the economy of Indian-occupied Jammu and Kashmir (Kashmir from here onwards). They not just provide employment but also through export revenues. The handicraft industries amount to around 72 percent of Kashmir's total exports (Directorate of Economics & Statistics, 2018).

The shawl industry is one of the oldest industries in Kashmir and is often referred to as "as old as the hills of Kashmir" (Chaku, 1909). Historically, the shawls industry has been one of the most organized and employment-generating sectors, with a major share of revenue coming from exports to India, Central Asia, and Europe (Bates, 1980). The historical importance and contribution of the shawl. The exact origins of the shawl industry are debatable; however, significant evidence shows that shawl manufacturing became an established industry under the reign of Sultan Zain-ul-Abidin, who ruled Kashmir between 1420-1470 AD (Ahmad, 2005; Digby, 2007; Skarratt et al., 2018). Zain-ul-Abidin gave state patronage to the shawl industry and brought innovations such as the introduction of looms. According to Ahmad (2015) and Khan (1986) introduction of looms by Zain-ul-Abidin was inspired by Ameer Taimur's introduction of looms in Samarkand. However, (Skarratt et al., 2018) criticize the theory of Zain-ul-Abidin's being the architect of the shawl industry as an overstatement. They argue that the theory of Zain-ul-Abidin being inspired by Taimur to establish the shawl industry is flawed because he was not even born when Taimur attacked India. Further, they also criticize travel accounts for simply reproducing local folktales and imposing Eurocentric ideas. After the death of the Zain-ul-Abdin and the end of Shah Mir's reign, there was not any significant development in the shawl industry as most of the era of the Chak dynasty in Kashmir was marked by invasions, wars, and communal disturbances between Shia and Sunni sects of Islam (Ahmad, 2017; Khan, 1953).

The shawl industry saw another renaissance in the Mughal period, which dates from 1586 to 1751 AD. Like, under the reign of Zain-ul-Abdin, the shawl industry also enjoyed state backing under the Mughals. Shawls were not only used as prestigious gifts, but the Mughals also encouraged trade which increased the overall exports. Mughals under Akbar developed Srinagar into an industrial center. Several state-owned factories were set up with over 40,000 looms in operation, 24,000 of which were in Srinagar. Mughals also introduced new production techniques, which increased the productivity of loom manifolds (Maskiel, 2002; Ashfaque, 2010; Mandloo, 2016). Similarly, Maskiel (2002) and Mattoo (1975) emphasize the importance of the Mughal gift economy in increasing the demand for Kashmiri shawls. Moreover, they argue that the interest of the Mughal court in the shawl industry also increased the trade volume of Kashmiri shawls in Central Asia, outperforming Iranian handicrafts, which eventually led to the monopolization of trade.

The shawl trade continued to flourish under Afghan rule due to the high demand for Shawls in India and Central Asia. Afghans established Daag-i-Shawl, a department to regulate the shawl trade and collect taxes. Heavy taxes on shawl weavers and shawl exports, which were one of the main sources of employment, led to famines, resulting in the migration of weavers and artisans (Dar & Shah, 2019).

The Sikh regime, according to Ahmad (2005), inherited a crisis-ridden shawl industry from Afghans. They initially removed all the taxes imposed on shawl manufacturing, which helped stabilize it for a brief time,

but later, they re-imposed taxes, which, coupled with the famine of 1834, further deepened the crisis and worsened working conditions for weavers.  After the establishment of the Dogra regime in 1847 the conditions of the shawl industry did not change much until the 1860s when the Maharaja waived off all taxes and allowed weavers to change employers, which drastically increased the number of weavers in the valley (Ahmad, 2005).

The main market for shawl exports in this era was Europe, especially France, but the Franco-Prussian war in 1870, followed by another famine in 1877 and subsequent World Wars, again flung the industry into a long crisis which forced Maharaja to re-impose taxes (Ahmad, 2004; Bajwa, 1993). Although shawl exports reached their highest pre-1947 level under Mahajra due to the establishment of the Jhelum Valley Cart Road and other investments in social overhead capital, however, the shawl industry did not recover from the crisis in Europe as local and Indian demand was not sufficient (Jahan & Ahmed, 2020). However, Sharrad (2004) attributes this decline to the rise of paisley production, shawls based on pirated designs of original Kashmiri shawls, in Europe, especially in the South of Scotland.

There exists an agreement among researchers regarding the decline in the shawl industry. However, there is no consensus on the causes of this decline. Ashraf et al. (2016) attribute the decline to a lack of competitiveness with the Indian shawl industry based in Amritsar whereas, Prakash (2000) while in his analysis and review of the developmental policy of Kashmiri state argues that due to protectionist policies adopted by the state government based on the New Kashmir manifesto, there existed a conflict between the state government and the entrepreneurial class, which prevented any significant investments from the private sector.

On the other hand, Butt and Pandow (2012) are of the view that the tensions between the two neighboring countries result in a lack of investment in the region which has resulted in the decline of all major industries, including the shawl industry. Similarly, Mahapatra and Shekhawat (2008) argue that the conflict in the region and militancy makes it challenging to implement developmental policies, thus negatively impacting the shawl industry. Emphasizing, a multi-causal explanation of the crisis, Hassan and Mir (2020) argue that the decline of the shawl industry cannot be explained without taking into account a multitude of different reasons, including high prices, lack of technology, an unorganized market, unskilled labor, and fake products.

With this in the background, this study using exploratory data analysis showed how the development of the shawl industry was affected by internal conflicts and external crises. Moreover, it used univariate forecasting to show the negative prospects of the shawl industry. The rest of study is organized as follow. Section 2 describe the data and methodology. The results and discussion are presented in section 3 while section 4 concludes the study.

## 2.  DATA AND METHODOLOGY

This study uses data from 1918-1941 and 1995- 2018 based on trade reports, and from various Government publications such as Digest of Statistics 2018-2019 (Directorate of Economics and Statistics Planning and Development Department J&K), Economic Survey 2016-17 (Directorate of Economics and Statistics Planning and Development Department J&K) as shown in Table 1, Table 2, and illustrated in Figure 1.

**Table 1:** Exports of Kashmiri Woolen Shawls (1918-1941)

| Year | Exports in Crores | Year | Exports in Crores |
|---|---|---|---|
| 1918-1919 | 0.0890 | 1929-1930 | 0.0925 |
| 1919-1920 | 0.0619 | 1930-1931 | 0.0365 |
| 1920-1921 | 0.0538 | 1931-1932 | 0.0520 |
| 1921-1922 | 0.0228 | 1932-1933 | 0.1288 |
| 1922-1923 | 0.0695 | 1933-1934 | 0.0467 |
| 1923-1924 | 0.1104 | 1934-1935 | 0.0595 |
| 1924-1925 | 0.1766 | 1935-1936 | 0.0472 |
| 1925-1926 | 0.1301 | 1936-1937 | 0.0472 |
| 1926-1927 | 0.0207 | 1937-1938 | 0.0595 |
| (Apr) 1927-1927 (Oct) | 0.0809 | 1938-1939 | 0.0721 |
| (Oct) 1927-1928 (Sept) | 0.0871 | 1939-1940 | 0.0005 |
| (Oct) 1928-1929 (Sept) | 0.0927 | 1940-1941 | 0.0015 |

Source: Trade Reports 1918-1941 as cited in (Ganju, 1945)

Table 2: Annual Exports of Woolen shawl

| Years | Exports (Crores) | Total Handicraft Exports | Percentage Change in Shawl Exports | Shawl Exports as % of Total Handicraft Exports |
|---|---|---|---|---|
| 1995 | 13.5 | 293.5 | - | - |
| 1996 | 4.02 | 88.14 | -70.22% | -70% |
| 1997 | NA | NA | NA | NA |
| 1998 | 15.7 | 247 | NA | NA |
| 1999 | 8.5 | 556.99 | -45.93% | 126% |
| 2000 | 54.42 | 439.9 | 540.24% | -21% |
| 2001 | 36.69 | 504.25 | -33.13% | 15% |
| 2002 | 175 | 549.2 | 380.90% | 9% |
| 2003 | 195 | 595 | 11.43% | 8% |
| 2004 | 210.5 | 642 | 7.82% | 8% |
| 2005 | 220 | 705 | 4.64% | 10% |
| 2006 | 275 | 785 | 25% | 11% |
| 2007 | 310.29 | 1200.47 | 12.83% | 53% |
| 2008 | 226.5 | 705.05 | -27.16% | -41% |
| 2009 | 137.13 | 661.27 | -39.46 | -6% |
| 2010 | 302 | 1004.1 | 120.23% | 52% |
| 2011 | 607.03 | 1643.37 | 101% | 64% |
| 2012 | 104.11 | 1538.28 | -82.85% | -6% |
| 2013 | 579.72 | 1695.65 | 456.83% | 10% |
| 2014 | 368.2 | 1287.04 | -36.49% | -24% |
| 2015 | 376.79 | 1059.41 | 2.17% | -18% |
| 2016 | 304.05 | 1151.12 | -24.58% | 9% |
| 2017 | 284.13 | 1090.12 | 7.66% | -5% |

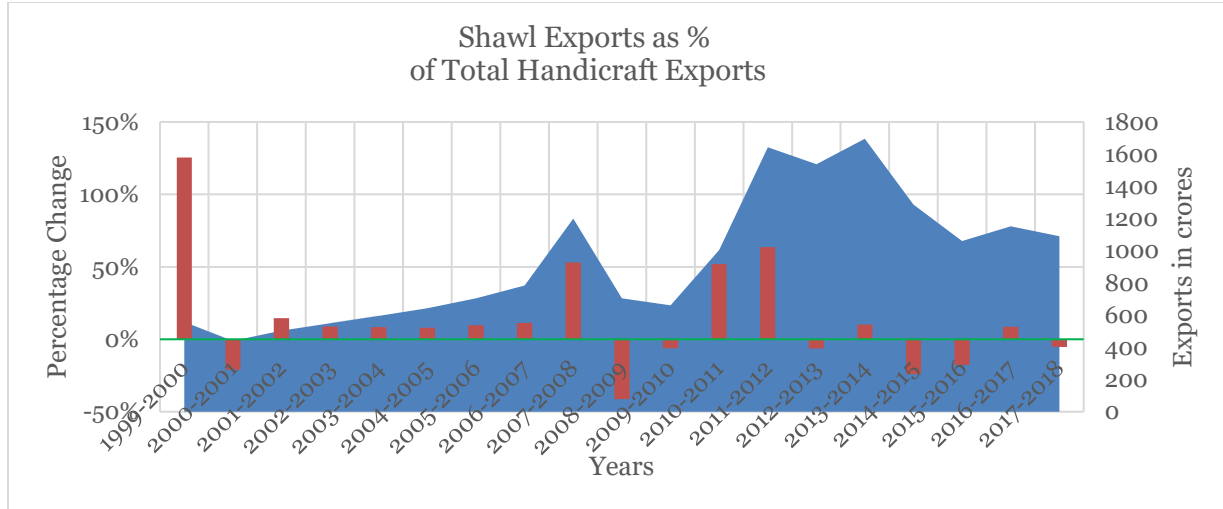Source: Computed from Economic Survey of 2016-17 and Digest of Statistics 2018-2019

**Figure 1:** Shawl Exports as Percentage of Total Handicraft Exports

Several studies have shown that ARIMA performs better than seasonal naïve and exponential smoothing models based on different forecast errors (Bodo et al., 1991; Erkekoglu et al., 2020; Sbrana & Silvestrini, 2014; Tomić and Stiepanovic, 2017). However, some studies also suggest that the smoothing model can also perform better than ARIMA (Oliveira & Oliveira, 2018). Therefore, to find the best model for forecasting the shawl exports data of Kashmir, a simple naïve forecasting model was used as a benchmark for the comparison of the performance of exponential smoothing and ARIMA based on different forecast errors such as MAPE, MPE, and MASE in which ARIMA model outperformed both simple naïve and simple exponential smoothing models.

The ARIMA model is made up of two models, the Autoregressive (AR) and the Moving Average (MA). It has specific parameters for the time series: the parameters p and q, which represent the order of the AR and the order of the MA, respectively. A parameter d is added that represents the number of differences. The general ARIMA model is given by:

$$\hat{Y}_t = \mu + \phi_1 Y_{t-1} + \cdots + \phi_p Y_{t-p} + \theta_1 \varepsilon_{t-1} + \cdots + \theta_q \varepsilon_{t-q} \tag{1}$$

Here φ corresponds to the autoregressive coefficient to be determined, θ is the moving average coefficient to be determined, $\varepsilon_t$ is the white noise which is a set of identically distributed random variables and has the mean of the values equal to zero with constant variance, and $Y_{t-p}$ is the normalized log of the series to be modeled.

The selection of the adequate ARIMA model to fit the data observed was carried out using the Akaike Information Criterion (abbreviated as AIC) (Akaike, 1973). This criterion is based on the identification of the lowest value for AIC, which theoretically results in the best model to fit the observed data.

## 3. RESULTS AND DISCUSSION

The exports increased from 0.0890 crore rupees in 1918-1919 to 0.1301 crore rupees in 1925-1926 after the First World War as shown in Table 1. However, the shawl exports declined significantly from the previous high of 0.1766 crore rupees in 1924-1925 to 0.0365 in 1930-31, the year of the Great Depression

which resulted in the adaptation of protectionist policies all across Europe, especially in France, which was one of the biggest importers of Kashmiri shawls (Dobbin, 1993; Jackson, 2002; Eichengreen & Irwin, 2010) The shawl export did increase in 1932-1933 due to short-lived reforms done by Maharaja, but this era also marked the rise of Paisley, which significantly reduced the European demand for Kashmiri shawls that led to the reintroduction of taxes that were previously waived off (Ahmad, 2005). This reimposition of taxes led to significant distrust among the masses, which eventually led to the events of 1947 (Naik, 2012).

Similarly, Figure 1 illustrates that throughout the 90s, the percentage change in shawl exports did not increase significantly due to the militancy in the region and the Kargil War of 1999. The exports increased in the subsequent decade at reached a peak in 2011-2012. Besides, the percentage share of shawl exports also did not significantly increase during this period. Later, the shawl exports did increase in 2014-2015, which shows that there was asymmetric growth in the industry; however, the overall trend indicates a decline in the shawl industry due to periodic waves of lockdowns within the state. Many studies finds similar pattern of growth in shawl industry (Emmett, 2019; Hassan et al., 2020). Following Box and Jenkin's methodology (Box & Jenkins, 1976) the time series was plotted without any difference to check seasonality. The plot did not show any significant trend or pattern as shown in Figure 2.
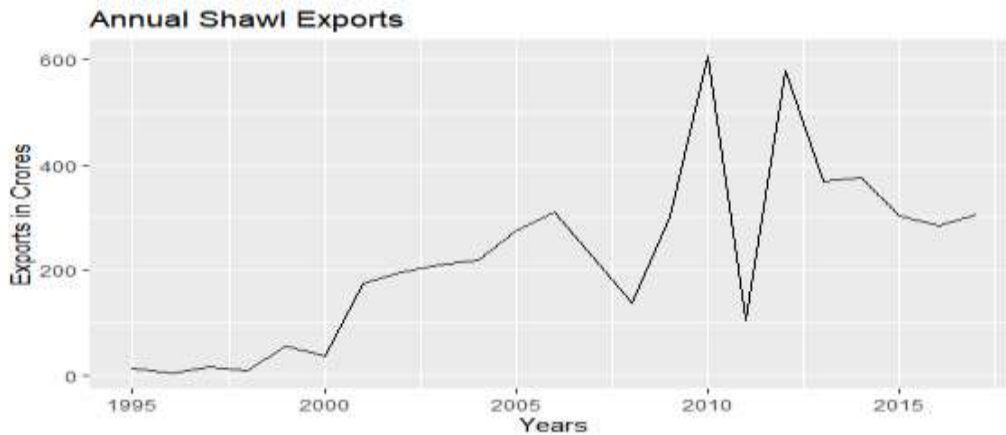


**Figure 2:** Time Plot of Annual Shawl Exports

Next, to check autocorrelation in the data, the autocorrelation function (ACF) was used to plot the residuals. The result of ACF illustrated that the data was not highly autocorrelated as shown in Figure 3.
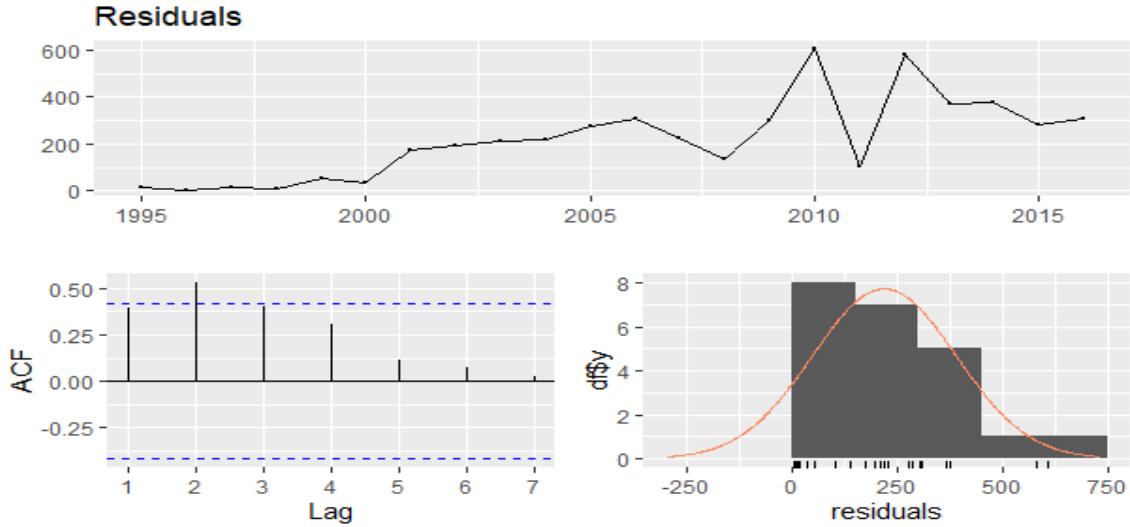
**Figure 3:** Residual Plot for Annual Exports.

After having checked the autocorrelation, the Augmented Dickey-Fuller test was used to check the stationarity of the data using two lags of the dependent variable. The coefficient of Dickey-Fuller was -1.8218 with p-value of 0.6403, indicating significant to accept the null hypothesis that the data was non-stationarity.

Using the benchmark test, the ARIMA (2, 1, 0) was selected for forecasting based on the relative values of forecast errors. The comparison of the values of standard deviation and mean errors is given in Table 3 and the residuals for ARIMA (2, 1, 0) are given in Figure 4.

**Table 3:** Comparison of Standard Deviation and Mean Errors

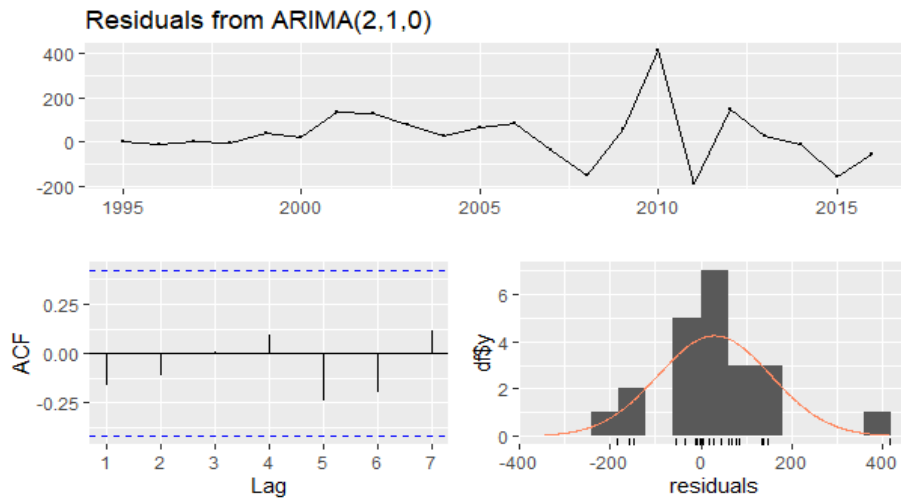| Test | SD | MAPE | MPE | MASE |
|------|------|------|------|------|
| Seasonal Naïve | 181.9428 | 73.0097 | -26.5711 | 1 |
| Exponential Smoothing | 140.9582 | 74.9621 | -26.9311 | 0.8265 |
| ARIMA (2,1,0) | 134.4284 | 49.6321 | -0.7219 | 0.7618 |



**Figure 4:** Residuals from ARIMA (2, 1, 0) for Annual Exports

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After selecting ARIMA (2, 1, 0) model, the shawl exports data was forecasted for 10 years at a 95% confidence interval, and the first difference returned the data shown in Table 4.

**Table 4:** The 10-year point forecast of shawl exports

| Year | Point Forecast | Lo 95 | Hi 95 |
|------|----------------|-------|-------|
| 2018 | 318.4923 | 55.0168 | 566.4820 |
| 2019 | 300.3483 | 34.2147 | 581.4820 |
| 2020 | 311.6600 | 9.8217 | 613.4983 |
| 2021 | 308.0807 | -20.0467 | 636.2082 |
| 2022 | 307.3339 | -37.2041 | 651.8719 |
| 2023 | 309.1820 | -59.0494 | 677.4134 |
| 2024 | 307.8491 | -78.3961 | 694.0943 |
| 2025 | 308.3687 | -95.9852 | 712.7225 |
| 2026 | 308.3528 | -113.8494 | 730.5949 |
| 2027 | 308.1939 | -130.4457 | 746.8336 |

Finally, the 10-year shawl exports forecast was plotted, which showed a downward trend as shown in Figure 6.
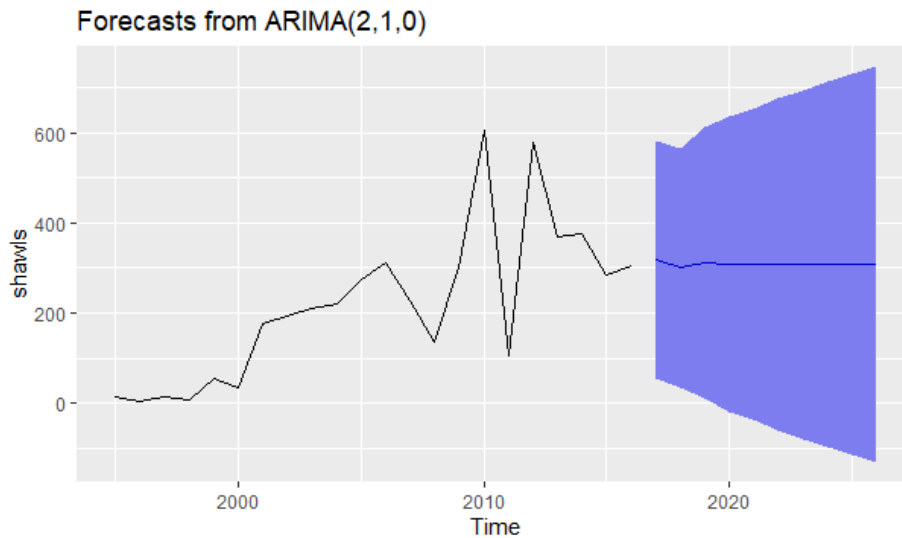


**Figure 6:** 10-year Forecast of Annual Exports with ARIMA (2, 1, 0)

## 4. CONCLUSION

Throughout history, the shawl industry has been one of the most important industries in Jammu and Kashmir. It is not only culturally significant but has also been a major source of exports and employment. It is well-established and recognized that the shawl industry is declining, which has aggravated in recent years. This study aimed to explore the importance of foreign trade for the development of the shawl industry, the reasons behind the decline, and its prospect. For this study, to understand the prospects of the industry, exports data from 1995- 2017 was forecasted using ARIMA for the next 10 years. Using trade statistics, the present study has demonstrated that foreign trade has historically played a vital role in the development of the shawl industry, and its decline is rooted in the conflict and low investment spiral, which decreases its productivity and hence its competitiveness. Moreover, the study has also shown that the

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# REFERENCES

Ahmad, P. (2004). The trade and commerce of Kashmir under Dogras (1885-1925 A.D.). *Proceedings of the Indian History Congress*, *65*, 657–666. http://www.jstor.org/stable/44144780

Ahmad, P. (2005). Shawl industry and the institution of Daghshawl in Kashmir (1846-1947). *Proceedings of the Indian History Congress,* 66, 809-817. https://www.jstor.org/stable/44145893

Ahmad, M. (2015). Economy of Kashmir under sultans (Sultanate Period). *International Journal of History and Cultural Studies (IJHCS), 1(3), 38-44*

Ahmad, K. B. (2017). *Kashmir: exposing the myth behind the narrative.* SAGE Publishing India.

Akaike, H. (1973). Maximum likelihood identification of Gaussian autoregressive moving average models. *Biometrika*, *60*(2), 255-265.

Ashfaque, F. (2009). Shawl and carpet industry in Kashmir under the Mughals. *Proceedings of the Indian History Congress*, *70*, 285–296. http://www.jstor.org/stable/44147675

Ashraf, S. I., Ashraf, S. N., & Hafiz, S. M. (2016). Obstacles faced by craftsmen and traders in Pashmina sector: A Study of J&K. *International Journal of Advanced Research*, *4*(6), 1227–1239. http://dx.doi.org/10.21474/IJAR01/887

Bajwa, K. S. (1993). Industry during the reign of Maharaja Ranjit Singh. *Proceedings of the Indian History Congress*, *54*, 553–562. http://www.jstor.org/stable/44143028

Berg, M. (2014). Skill, Craft and histories of industrialisation in Europe and Asia. *Transactions of the Royal Historical Society*, *24*, 127-148.

Bodo, G., Cividini, A., & Signorini, L. F. (1991). Forecasting the Italian industrial production index in real time. *Journal of Forecasting*, *10*(3), 285-299.

Box, G.E.P. and Jenkins, G.M. (1976) *Time Series Analysis: Forecasting and Control*. Revised Edition, Holden-Day, San Francisco.

Butt, K. A., & Pandow, B. A. (2012). Investment, industrial growth and conflict in Kashmir: an analysis. *SSRN Electronic Journal*. https://dx.doi.org/10.2139/ssrn.2944651

Dar, A. H., & Shah, M. A. M. (2019). Reinterpreting Afghan Rule in Kashmir. *Communications*, 27(1), 179-182.

Digby, S. (2007). Export Industries and handicraft production under the sultans of Kashmir. *The Indian Economic & Social History Review, 44(4), 407–423.* https://doi.org/10.1177/001946460704400401

Oliveira, E. M., & Oliveira, F. L. C. (2018). Forecasting mid-long-term electric energy consumption through bagging ARIMA and exponential smoothing methods. *Energy*, 144, 776-788.

Dobbin, F. R. (1993). The social construction of the great depression: industrial policy during the 1930s in the United States, Britain, and France. *Theory and Society*, 1-56.

Eichengreen, B., & Irwin, D. A. (2010). The slide to protectionism in the great depression: who succumbed and why? *The Journal of Economic History*, *70*(4), 871-897.

Emmett, D. (2019). The embroidery artisans of the Kashmir Valley. *Textile Society of America Symposium Proceedings*. https://doi.org/10.32873/unl.dc.tsasp.0005

Erkekoglu, H., Garang, A. P. M., & Deng, A. S. (2020). Comparative evaluation of forecast accuracies for ARIMA, exponential smoothing and VAR. *International Journal of Economics and Financial Issues*, *10*(6), 206.

Ganju, M. (1945). *Textile Industries in Kashmir: Jammu and Kashmir State*. Premier Publication. https://agris.fao.org/agris-search/search.do?recordID=US201300260000

Hassan, S. U., Mishra, B., & Bhat, A. A. (2020). The economy under majoritarian and coalition governments in fragile states of India: A case study of Jammu and Kashmir (India). *Journal of Public Affairs*. https://doi.org/10.1002/pa.2255

Hassan, R., & Mir, P. A. (2020). Problems and revival of handicraft industry in Kashmir – An analysis. *Journal of Critical Reviews*, 7(18): 3486-3494

Jackson, J. (2002). *The politics of depression in France 1932-1936*. Cambridge University Press.

Jahan, B., & Ahmad, P. (2020). Impact of the international crises on the external trade of Kashmir (1870-1947 AD). *Open Journal of Social Sciences*, *8*(10), 171-192.

Jain, L. C. (1986). A heritage to keep: The handicrafts industry, 1955-85. *Economic and Political Weekly*, *21*(20), 873–887. http://www.jstor.org/stable/4375683

Kautsky, K. (1984). The competitive capacity of the small-scale enterprise in agriculture. in *Paths of Development in Capitalist Agriculture* (pp. 13-28). Palgrave Macmillan, London.

Khan, M. I. (1986). The impact of Islam on Kashmir in the Sultanate period (1320-1586). *The Indian Economic & Social History Review*, 23(2), 187-205.

Khan, M. H. (1953). Some aspects of Kashmir history under the Shah Mirs and the Chaks. *in Proceedings of the Indian History Congress* (Vol. 16, pp. 194-200). Indian History Congress.

Mahapatra, D. A., & Shekhawat, S. (2008). The peace process and prospects for economic reconstruction in Kashmir. *Peace & Conflict Review*, 3(1).

Mandloo, S. A. (2016). Trade and commerce of Kashmir during the Mughal period. *Proceedings of the Indian History Congress*, *77*, 206–212. https://www.jstor.org/stable/26552641

Maskiel, M. (2002). Consuming Kashmir: Shawls and empires, 1500-2000. *Journal of World History,* 13(1), 27-65. http://www.jstor.org/stable/20078943

Mattoo, A. M. (1975). Shawl industry in Kashmir in the Mughal period. *Proceedings of the Indian History Congress*, *36*, 267–275. http://www.jstor.org/stable/44138851

Mukund, K., & Syamasundari, B. (1998). Doomed to Fail? "Handloom Weavers" Co-operatives in Andhra Pradesh. *Economic and Political Weekly*, *33*(52), 3323–3332. http://www.jstor.org/stable/4407522

Naik, S. A. (2012, January). Landlords, peasants and the Dogra rule in Kashmir. In *Proceedings of the Indian History Congress* (Vol. 73, pp. 782-793). Indian History Congress.

Prakash, S. (2000). The political economy of Kashmir since 1947. *Contemporary South Asia*, *9*(3), 315–337. http://dx.doi.org/10.1080/713658753

Richards, P. (1979). The state and early industrial capitalism: The case of the Handloom Weavers. *Past & Present*, *83*, 91–115. http://www.jstor.org/stable/650602

Sbrana, G., & Silvestrini, A. (2014). Random switching exponential smoothing and inventory forecasting. *International Journal of Production Economics*, *156*, 283-294.

Sharrad, P. (2004). Following the map: A postcolonial unpacking of a Kashmir shawl. *TEXTILE*, 2(1), 64–78. https://doi.org/10.2752/147597504778052900

Tomić, D., & Stjepanović, S. (2017). Forecasting capacity of ARIMA models: A study on Croatian industrial production and its sub-sectors. *Zagreb International Review of Economics & Business*, *20*(1), 81-99.