Mini Project on Investigating the Impact of Agriculture & Industry on Indian Economy

Dataset: World Development Indicators

Importing Libraries

In [4]:

```
import pandas as pd
import numpy as np
import random
import matplotlib.pyplot as plt
```

Using Pandas to Read the Dataset

Using the *read_csv* function in pandas, we will ingest the Indicators file.

In [6]:

```
data = pd.read_csv('./world-development-indicators/Indicators.csv')
data.head()
```

Out[6]:

	CountryName	CountryCode	IndicatorName	IndicatorCode	Year	Value
0	Arab World	ARB	Adolescent fertility rate (births per 1,000 wo...	SP.ADO.TFRT	1960	1.335609e+02
1	Arab World	ARB	Age dependency ratio (% of working-age populat...	SP.POP.DPND	1960	8.779760e+01
2	Arab World	ARB	Age dependency ratio, old (% of working-age po...	SP.POP.DPND.OL	1960	6.634579e+00
3	Arab World	ARB	Age dependency ratio, young (% of working-age ...	SP.POP.DPND.YG	1960	8.102333e+01
4	Arab World	ARB	Arms exports (SIPRI trend indicator values)	MS.MIL.XPRT.KD	1960	3.000000e+06

In [9]:

```
#Filtering rows indicating Arable land in India over the years
hist_indicator = 'Arable land \(hectares per person\)'
hist_country = 'India'

mask1 = data['IndicatorName'].str.contains(hist_indicator)
mask2 = data['CountryName'].str.contains(hist_country)

stage = data[mask1 & mask2]
stage['Value'] = stage['Value'].apply(lambda x: x*100)
stage.head()
```

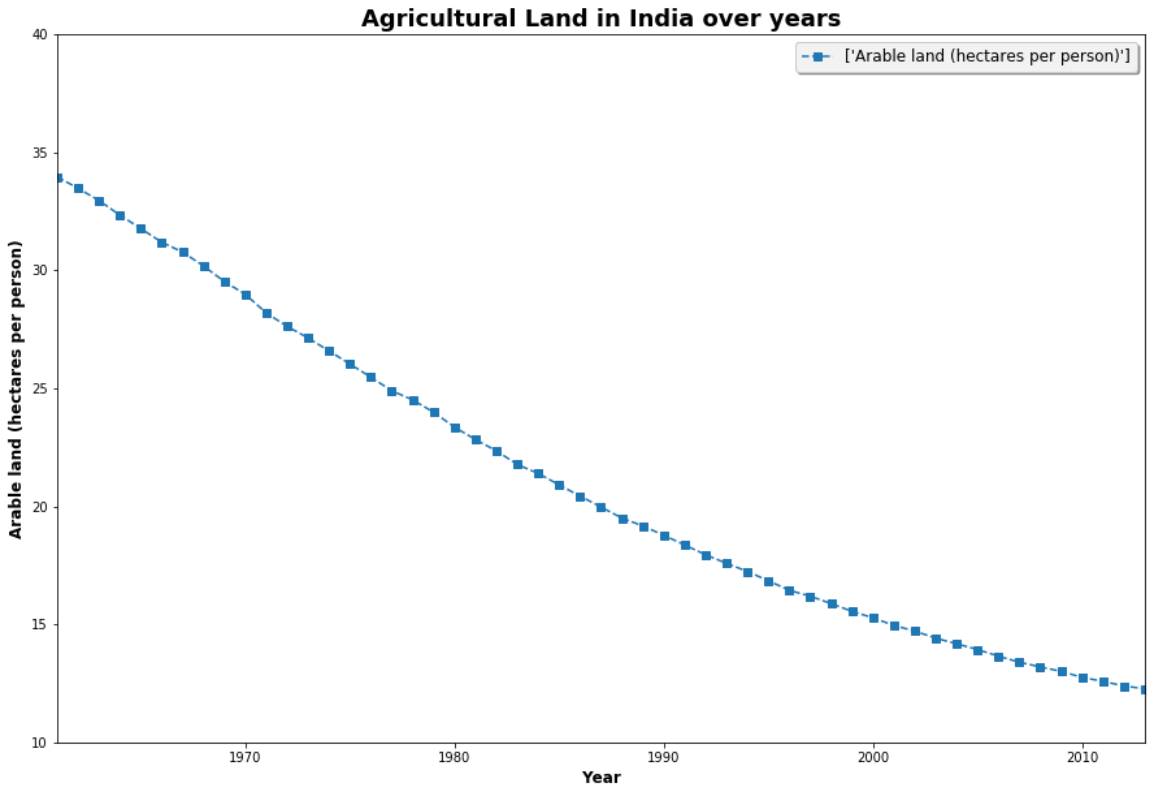
```
G:\DataScienceAnaconda\lib\site-packages\ipykernel_launcher.py:9: SettingW
ithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-doc
s/stable/user_guide/indexing.html#returning-a-view-versus-a-copy
  if __name__ == '__main__':
```

Out[9]:

	CountryName	CountryCode	IndicatorName	IndicatorCode	Year	Value
36502	India	IND	Arable land (hectares per person)	AG.LND.ARBL.HA.PC	1961	33.967495
64037	India	IND	Arable land (hectares per person)	AG.LND.ARBL.HA.PC	1962	33.479033
92481	India	IND	Arable land (hectares per person)	AG.LND.ARBL.HA.PC	1963	32.962136
121278	India	IND	Arable land (hectares per person)	AG.LND.ARBL.HA.PC	1964	32.342669
151948	India	IND	Arable land (hectares per person)	AG.LND.ARBL.HA.PC	1965	31.775368

In [35]:

```
import matplotlib.pyplot as plt

fig, ax = plt.subplots(figsize=(15, 10))

ax.set_ylim(min(0,stage['Value'].min()), 2*stage['Value'].max())
ax.set_title('Agricultural Land in India over years', fontdict={'fontweight':'bold', 'fontsize': 18})
ax.plot(stage['Year'], stage['Value'] , 's--', label=stage['IndicatorName'].unique())

# Add the legend
legend = plt.legend(loc = 'upper right',
                    shadow=True,
                    prop={'weight':'roman','size':'large'})

# Rectangle around the legend
frame = legend.get_frame()
frame.set_facecolor('0.95')
plt.xlabel('Year',fontdict={'fontweight':'bold', 'fontsize': 12})
plt.ylabel('Arable land (hectares per person)',fontdict={'fontweight':'bold', 'fontsize': 12})
plt.axis([1961, 2013, 10, 40])
plt.show()
```



In [30]:

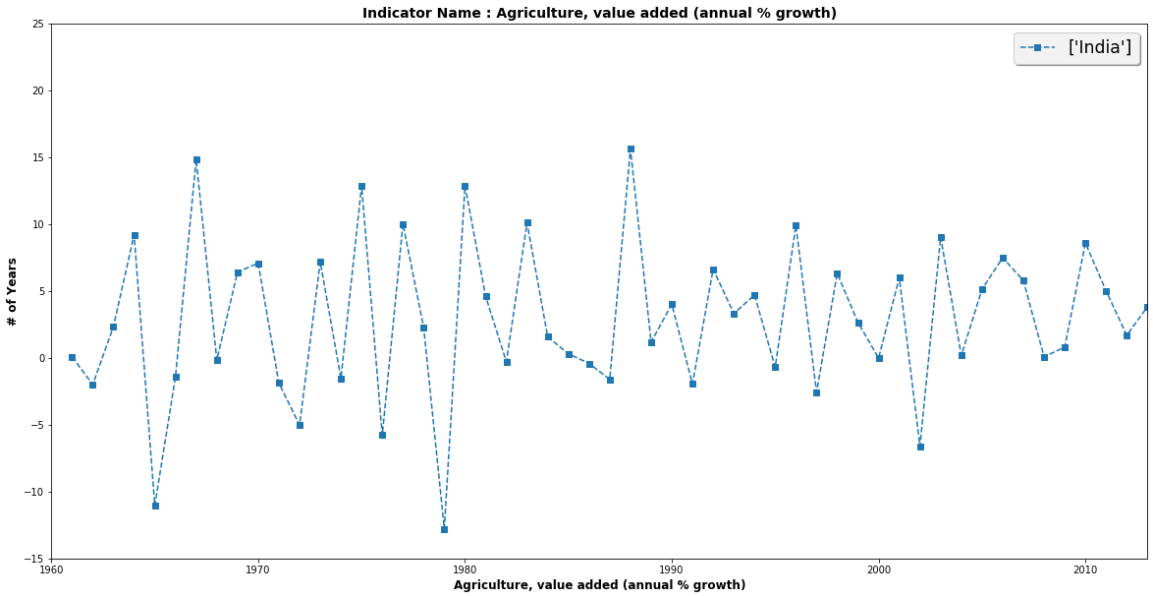
```
#Filtering the % Annual growth in Agriculture over the years in India
hist_indicator2 = 'Agriculture, value added \(annual \% growth\)'
hist_country2 = 'India'

mask11 = data['IndicatorName'].str.contains(hist_indicator2)
mask22 = data['CountryName'].str.contains(hist_country2)

stage2 = data[mask11 & mask22]
stage2.head()
```

Out[30]:

	CountryName	CountryCode	IndicatorName	IndicatorCode	Year	Value
36496	India	IND	Agriculture, value added (annual % growth)	NV.AGR.TOTL.KD.ZG	1961	0.084207
64031	India	IND	Agriculture, value added (annual % growth)	NV.AGR.TOTL.KD.ZG	1962	-1.989099
92475	India	IND	Agriculture, value added (annual % growth)	NV.AGR.TOTL.KD.ZG	1963	2.339252
121272	India	IND	Agriculture, value added (annual % growth)	NV.AGR.TOTL.KD.ZG	1964	9.224275
151942	India	IND	Agriculture, value added (annual % growth)	NV.AGR.TOTL.KD.ZG	1965	-11.042197

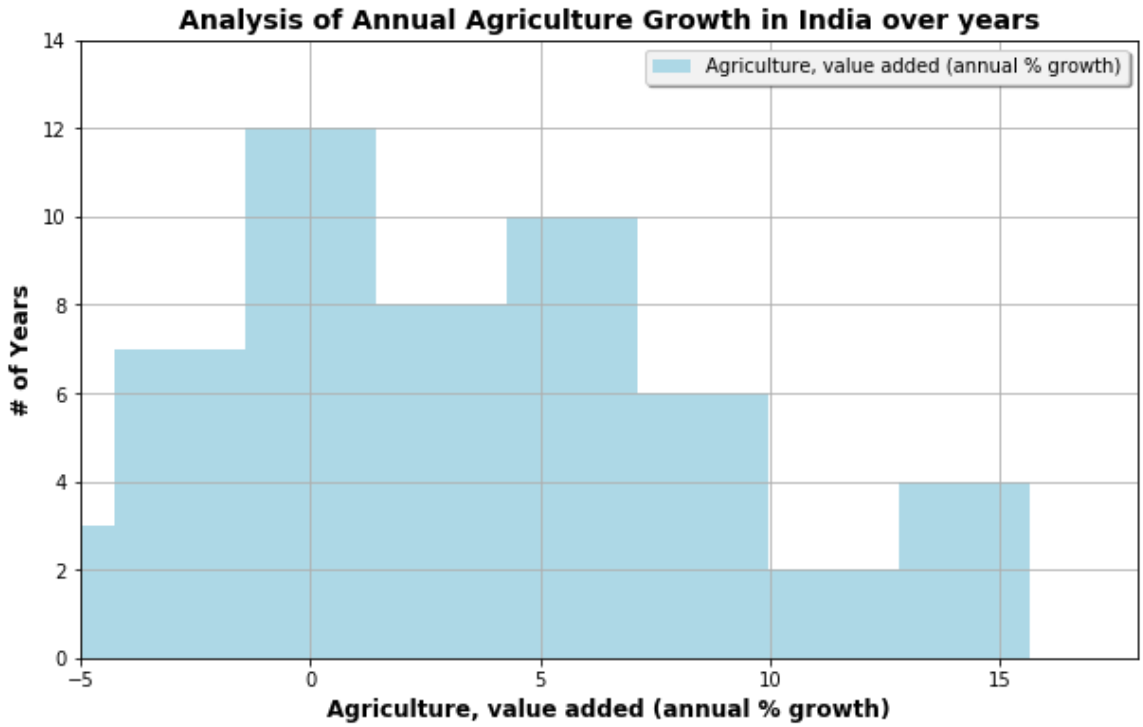
In [65]:

```
import matplotlib.pyplot as plt

fig, ax = plt.subplots(figsize=(20, 10))

ax.set_ylim(min(0,stage2['Value'].min()), 2*stage2['Value'].max())
ax.set_title('Indicator Name : ' + stage2['IndicatorName'].iloc[0],fontdict={'fontweigh
t':'bold', 'fontsize': 14})
ax.plot(stage2['Year'], stage2['Value'] , 's--', label=stage2['CountryName'].unique())

# Add the legend
legend = plt.legend(loc = 'upper right',
                    shadow=True,
                    prop={'weight':'roman','size':'xx-large'})

# Rectangle around the legend
frame = legend.get_frame()
frame.set_facecolor('0.95')
plt.xlabel(stage2['IndicatorName'].iloc[0],fontdict={'fontweight':'bold', 'fontsize': 1
2})
plt.ylabel('# of Years',fontdict={'fontweight':'bold', 'fontsize': 12})
plt.axis([1960, 2013,-15,25])
plt.show()
```



In [71]:

```
fig, ax = plt.subplots(figsize=(10, 6))

hist_data = stage2['Value'].values

plt.hist(hist_data, 10, density=False, facecolor='lightblue',label=stage2['IndicatorNam
e'].unique())

plt.xlabel(stage2['IndicatorName'].iloc[0],fontdict={'fontweight':'bold', 'fontsize': 1
2})
plt.ylabel('# of Years',fontdict={'fontweight':'bold', 'fontsize': 12})
plt.title('Analysis of Annual Agriculture Growth in India over years',fontdict={'fontwe
ight':'bold', 'fontsize': 14})
# Add the Legend
legend = plt.legend(loc = 'upper right',
                    shadow=True,
                    prop={'weight':'roman','size':'medium'})

# Rectangle around the legend
frame = legend.get_frame()
frame.set_facecolor('0.95')
plt.grid(True)
plt.axis([-5,18,0,14])
plt.show()
```



In [72]:

```
# selecting Food production index  for India
fpi_india = 'Food production index \(2004\-2006 \= 100\)'
hist_country6 = 'India'

mask16 = data['IndicatorName'].str.contains(fpi_india)
mask26 = data['CountryName'].str.contains(hist_country6)

fpi_stage = data[mask16 & mask26]
fpi_stage.head()
```

Out[72]:

	CountryName	CountryCode	IndicatorName	IndicatorCode	Year	Value
36548	India	IND	Food production index (2004-2006 = 100)	AG.PRD.FOOD.XD	1961	32.17
64086	India	IND	Food production index (2004-2006 = 100)	AG.PRD.FOOD.XD	1962	31.74
92530	India	IND	Food production index (2004-2006 = 100)	AG.PRD.FOOD.XD	1963	32.46
121327	India	IND	Food production index (2004-2006 = 100)	AG.PRD.FOOD.XD	1964	33.29
151999	India	IND	Food production index (2004-2006 = 100)	AG.PRD.FOOD.XD	1965	31.73

In [73]:

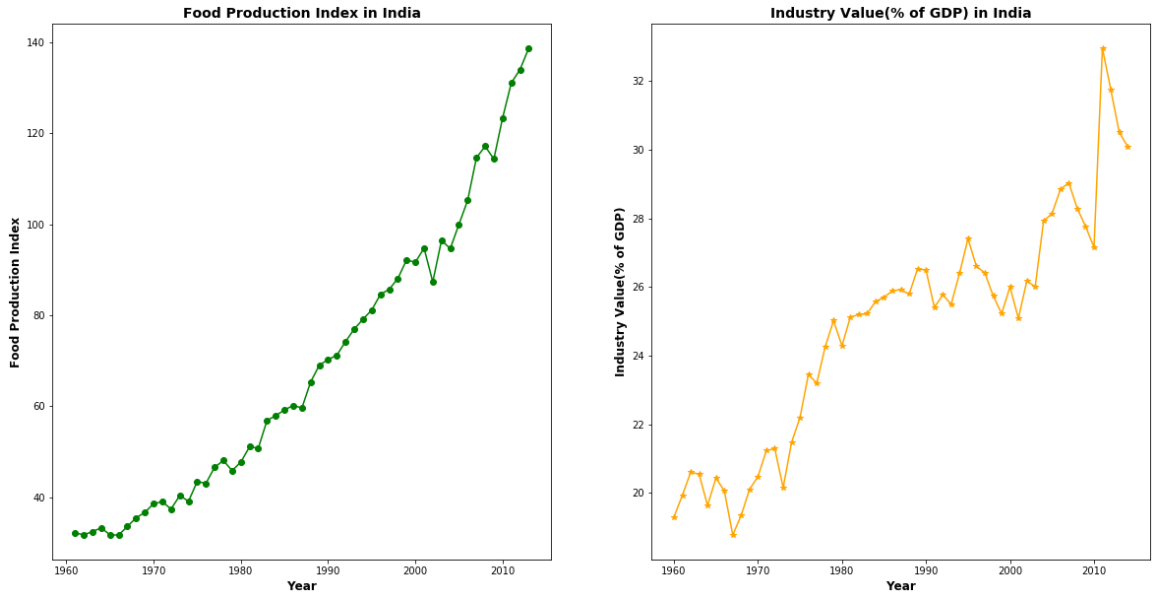
```
# selecting Industry Value(% of GDP)  for India
ind_india = 'Industry, value added \(\% of GDP\)'
hist_country7 = 'India'

mask17 = data['IndicatorName'].str.contains(ind_india)
mask27 = data['CountryName'].str.contains(hist_country7)


ind_stage = data[mask17 & mask27]
ind_stage.head()
```

Out[73]:

	CountryName	CountryCode	IndicatorName	IndicatorCode	Year	Value
11675	India	IND	Industry, value added (% of GDP)	NV.IND.TOTL.ZS	1960	19.299581
36623	India	IND	Industry, value added (% of GDP)	NV.IND.TOTL.ZS	1961	19.933228
64165	India	IND	Industry, value added (% of GDP)	NV.IND.TOTL.ZS	1962	20.608290
92610	India	IND	Industry, value added (% of GDP)	NV.IND.TOTL.ZS	1963	20.543741
121407	India	IND	Industry, value added (% of GDP)	NV.IND.TOTL.ZS	1964	19.638801

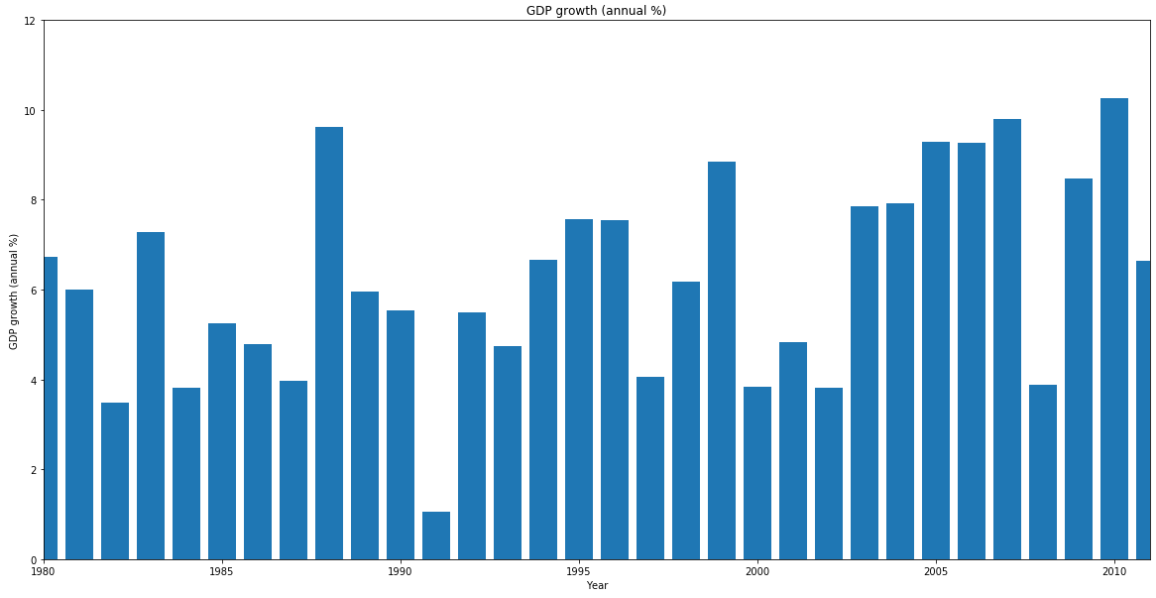
In [88]:

```
plt.figure(figsize=(20,10))
plt.subplot(121)
plt.plot( 'Year', 'Value', data=fpi_stage, marker='o', color="green")
plt.xlabel('Year',fontdict={'fontweight':'bold', 'fontsize': 12})
plt.ylabel('Food Production Index',fontdict={'fontweight':'bold', 'fontsize': 12})
plt.title("Food Production Index in India",fontdict={'fontweight':'bold', 'fontsize': 1
4})


plt.subplot(122)
plt.plot( 'Year', 'Value', data=ind_stage, marker='*', color="orange")
plt.xlabel('Year',fontdict={'fontweight':'bold', 'fontsize': 12})
plt.ylabel('Industry Value(% of GDP)',fontdict={'fontweight':'bold', 'fontsize': 12})
plt.title("Industry Value(% of GDP) in India",fontdict={'fontweight':'bold', 'fontsize'
: 14})

plt.show()
```



In [89]:

```
#Land under cereal production (hectares)
# select GDP Per capita emissions for the United States
gdp_india = 'GDP growth \(annual \%\)'
hist_country = 'India'

masked1 = data['IndicatorName'].str.contains(gdp_india)
masked2= data['CountryName'].str.contains(hist_country)

# stage is just those indicators matching the USA for country code and CO2 emissions ov
er time.
gdp_stage = data[masked1 & masked2]
gdp_stage.head()

#plot gdp_stage vs stage

# switch to a line plot
plt.figure(figsize=(15,10))
plt.bar(gdp_stage['Year'].values, gdp_stage['Value'].values)

# Label the axes
plt.xlabel('Year')
plt.ylabel(gdp_stage['IndicatorName'].iloc[0])

#label the figure
plt.title(gdp_stage['IndicatorName'].iloc[0])

# to make more honest, start they y axis at 0GDP per capita growth \(annual \%\)
plt.axis([1980, 2011, 0, 12])

plt.show()
```



In [90]:

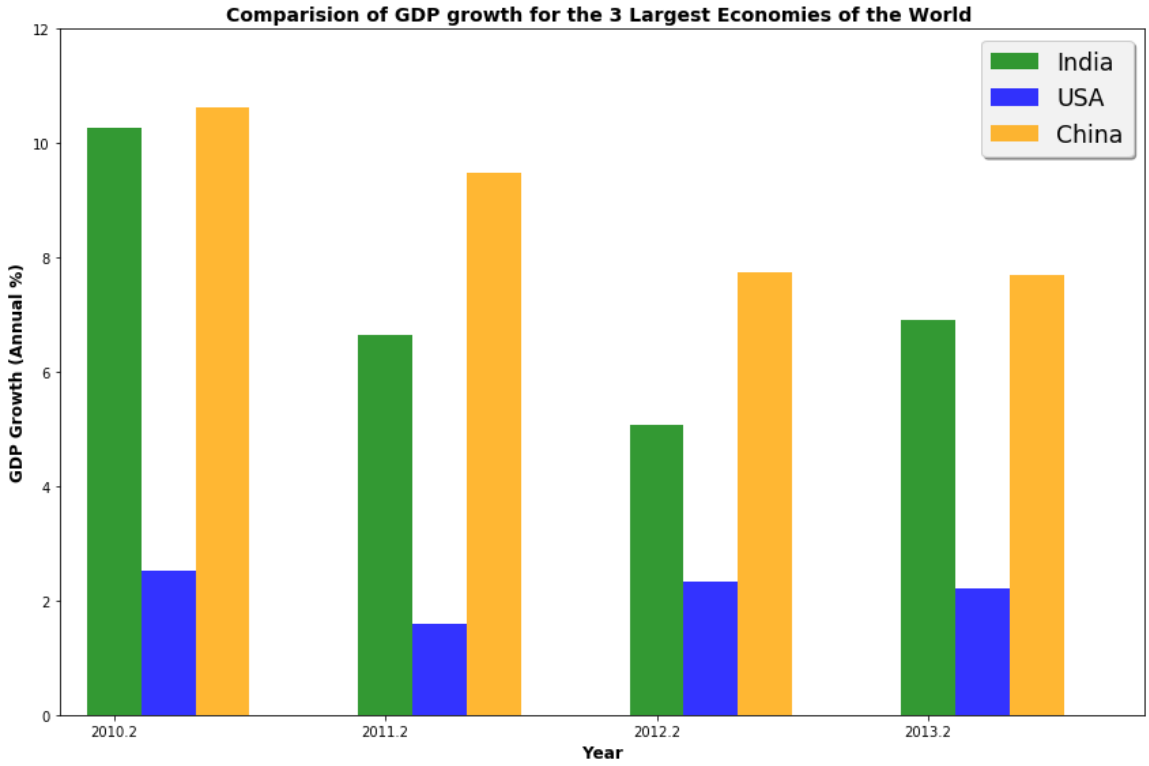
```
gdp_us = 'GDP growth \(annual \%\)'
hist_countr = 'USA'

masked11 = data['IndicatorName'].str.contains(gdp_us)
masked22= data['CountryCode'].str.contains(hist_countr)

gdp_stage_us = data[masked11 & masked22]
gdp_stage_us.head()


gdp_ch = 'GDP growth \(annual \%\)'
hist_count = 'CHN'

masked13 = data['IndicatorName'].str.contains(gdp_ch)
masked23= data['CountryCode'].str.contains(hist_count)

gdp_stage_ch = data[masked13 & masked23]
gdp_stage_ch.tail()
```

Out[90]:

	CountryName	CountryCode	IndicatorName	IndicatorCode	Year	Value
4893516	China	CHN	GDP growth (annual %)	NY.GDP.MKTP.KD.ZG	2010	10.631708
5077102	China	CHN	GDP growth (annual %)	NY.GDP.MKTP.KD.ZG	2011	9.484506
5252854	China	CHN	GDP growth (annual %)	NY.GDP.MKTP.KD.ZG	2012	7.750298
5422912	China	CHN	GDP growth (annual %)	NY.GDP.MKTP.KD.ZG	2013	7.683810
5564395	China	CHN	GDP growth (annual %)	NY.GDP.MKTP.KD.ZG	2014	7.268461

In [99]:

```
import numpy as np
import matplotlib.pyplot as plt

n_groups = 4


# create plot
plt.figure(figsize=(12,8))

index = np.all(gdp_stage['Year'])

bar_width = 0.20
opacity = 0.8

rects1 = plt.bar(gdp_stage['Year'].values + bar_width, gdp_stage['Value'].values, bar_w
idth,alpha=opacity,color='green',label='India')

rects2 = plt.bar(gdp_stage_us['Year'].values + bar_width*2, gdp_stage_us['Value'].value
s, bar_width,alpha=opacity,color='blue',label='USA')

rects3 = plt.bar(gdp_stage_ch['Year'].values + bar_width*3, gdp_stage_ch['Value'].value
s, bar_width,alpha=opacity,color='orange',label='China')

plt.xlabel('Year',fontdict={'fontweight':'bold', 'fontsize': 12})
plt.ylabel('GDP Growth (Annual %)',fontdict={'fontweight':'bold', 'fontsize': 12})
plt.title('Comparision of GDP growth for the 3 Largest Economies of the World ',fontdic
t={'fontweight':'bold', 'fontsize': 14})
plt.xticks(gdp_stage['Year'] + bar_width)
legend=plt.legend(loc = 'upper right',
                  shadow=True,
                  prop={'weight':'roman','size':'xx-large'})

# Rectangle around the legend
frame = legend.get_frame()
frame.set_facecolor('0.95')

plt.tight_layout()
plt.axis([2010, 2014, 0, 12])
plt.show()
```



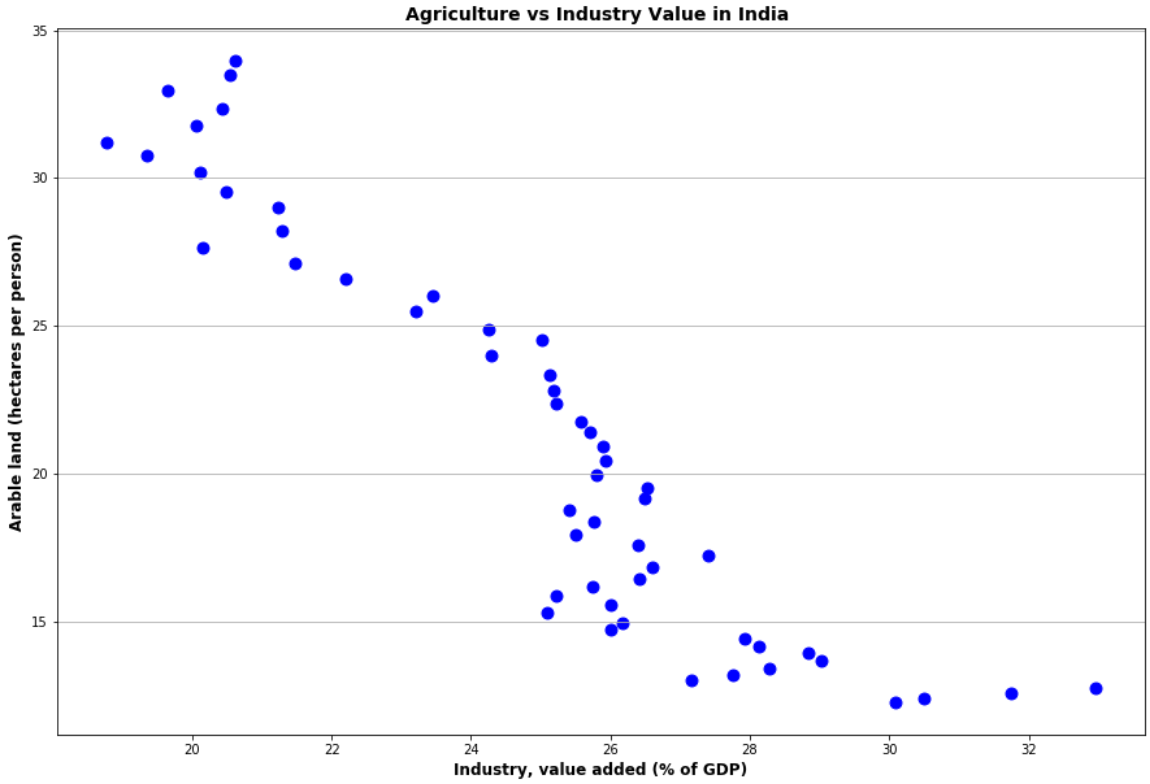
In [100]:

```
gdp_stage_trunc = gdp_stage[gdp_stage['Year'] > 1961]
ind_stage_trunc = ind_stage[ind_stage['Year'] > 1961]
#lnd_stage_trunc = lnd_stage[lnd_stage['Year'] > 1960]
stage_trunc = stage[stage['Year'] > 1960]
stage2_trunc = stage2[stage2['Year'] > 1961]
fpi_stage_trunc = fpi_stage[fpi_stage['Year'] > 1960]
print(len(fpi_stage_trunc))
print(len(stage2_trunc))
print(len(gdp_stage_trunc))
print(len(stage_trunc))
#print(len(lnd_stage_trunc))
print(len(ind_stage_trunc))
```

```
53
53
53
53
53
```

In [117]:

```
%matplotlib inline
import matplotlib.pyplot as plt
#plt.figure(figsize=(20,10))
fig, axis = plt.subplots(figsize=(15, 10))
# Grid lines, Xticks, Xlabel, Ylabel

axis.yaxis.grid(True)
axis.set_title('Agriculture vs Industry Value in India ',fontdict={'fontweight':'bold',
'fontsize': 14})
axis.set_xlabel(ind_stage_trunc['IndicatorName'].iloc[0],fontdict={'fontweight':'bold',
'fontsize': 12})
axis.set_ylabel(stage_trunc['IndicatorName'].iloc[0],fontdict={'fontweight':'bold', 'fo
ntsize': 12})
#axis.set_xlabel(stage_trunc['IndicatorName'].iloc[0],fontsize=10)

#X = gdp_stage_trunc['Value']
Y = stage_trunc['Value']
X = ind_stage_trunc['Value']

axis.scatter(X, Y, s=80, c='b', marker='o')
#plt.axis([0, 10, -10, 20])
plt.show()
```



In [118]:

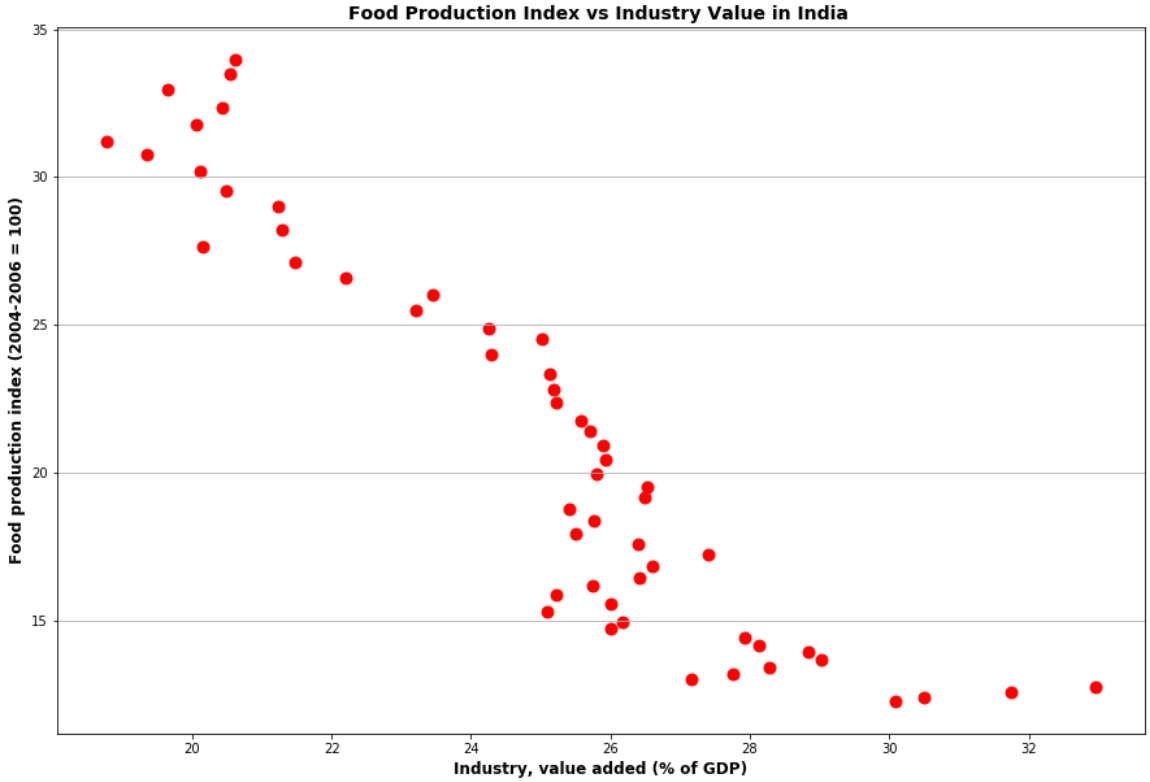
```
np.corrcoef(ind_stage_trunc['Value'],stage_trunc['Value'])
```

Out[118]:

```
array([[ 1.        , -0.92532957],
       [-0.92532957,  1.        ]])
```

In [122]:

```
%matplotlib inline
import matplotlib.pyplot as plt
#plt.figure(figsize=(20,10))
fig, axis = plt.subplots(figsize=(15, 10))
# Grid lines, Xticks, Xlabel, Ylabel

axis.yaxis.grid(True)
axis.set_title('Food Production Index vs Industry Value in India ',fontdict={'fontweigh
t':'bold', 'fontsize': 14})
axis.set_xlabel(ind_stage_trunc['IndicatorName'].iloc[0],fontdict={'fontweight':'bold',
'fontsize': 12})
axis.set_ylabel(fpi_stage_trunc['IndicatorName'].iloc[0],fontdict={'fontweight':'bold',
'fontsize': 12})
#axis.set_xlabel(stage_trunc['IndicatorName'].iloc[0],fontsize=10)

#X = gdp_stage_trunc['Value']
Y = stage_trunc['Value']
X = ind_stage_trunc['Value']

axis.scatter(X, Y, s=80, c='red', marker='o')
#plt.axis([0, 10, -10, 20])
plt.show()
```



In [126]:

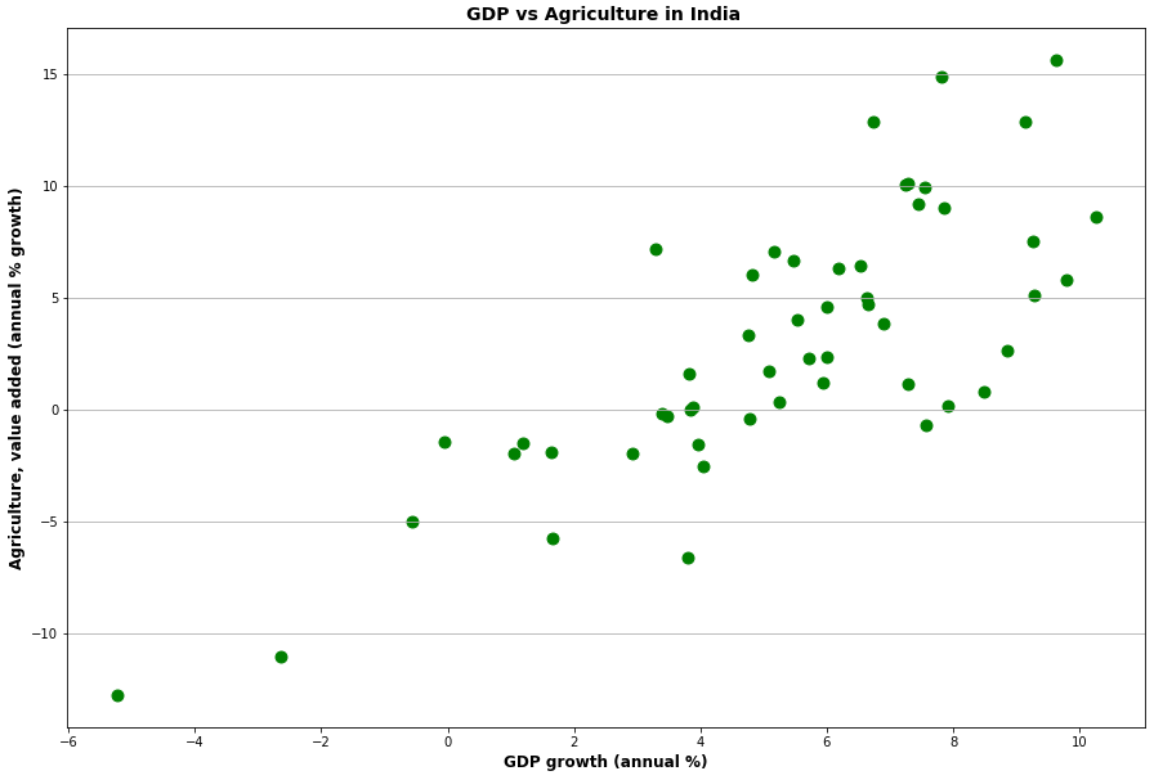
```
np.corrcoef(ind_stage_trunc['Value'],fpi_stage_trunc['Value'])
```

Out[126]:

```
array([[1.        , 0.89803935],
       [0.89803935, 1.        ]])
```

In [125]:

```
%matplotlib inline
import matplotlib.pyplot as plt
#plt.figure(figsize=(20,10))
fig, axis = plt.subplots(figsize=(15, 10))
# Grid lines, Xticks, Xlabel, Ylabel

axis.yaxis.grid(True)
axis.set_title('GDP vs Agriculture in India ',fontdict={'fontweight':'bold', 'fontsize'
: 14})
axis.set_xlabel(gdp_stage_trunc['IndicatorName'].iloc[0],fontdict={'fontweight':'bold',
'fontsize': 12})
axis.set_ylabel(stage2_trunc['IndicatorName'].iloc[0],fontdict={'fontweight':'bold', 'f
ontsize': 12})
#axis.set_xlabel(stage_trunc['IndicatorName'].iloc[0],fontsize=10)

#X = gdp_stage_trunc['Value']
Y = stage2_trunc['Value']
X = gdp_stage_trunc['Value']

axis.scatter(X, Y, s=80, c='green', marker='o')
#plt.axis([0, 10, -10, 20])
plt.show()
```



In [124]:

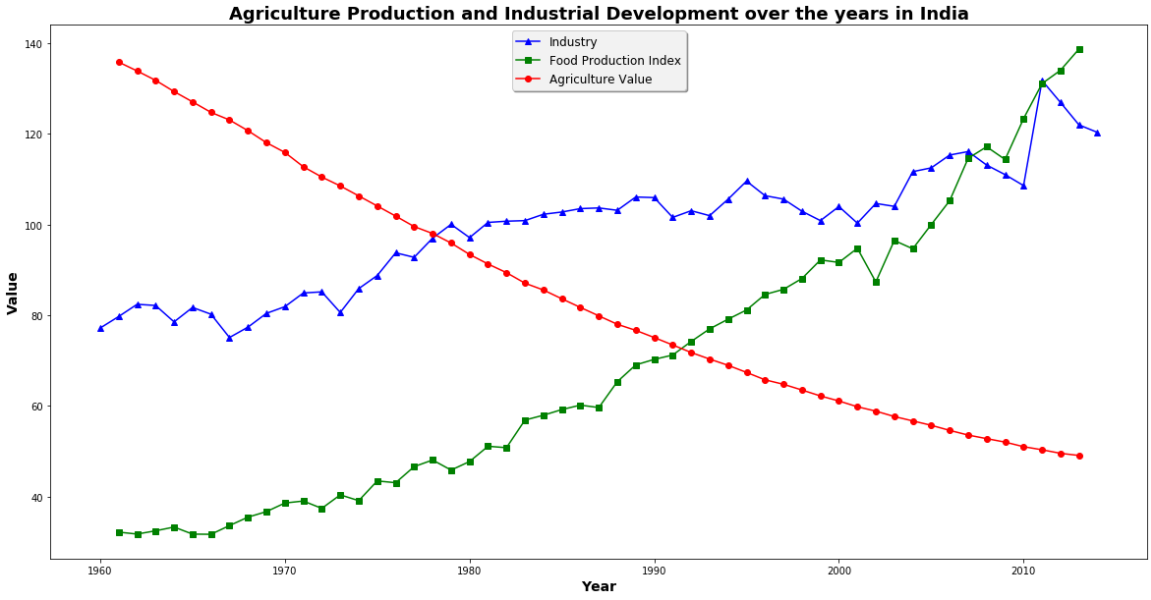
```
np.corrcoef(gdp_stage_trunc['Value'],stage2_trunc['Value'])
```

Out[124]:

```
array([[1.       , 0.7760216],
       [0.7760216, 1.       ]])
```

In [144]:

```
plt.figure(figsize=(20,10),facecolor="white")
plt.title('Agriculture Production and Industrial Development over the years in India',
fontdict={'fontweight':'bold', 'fontsize': 18})
#ax = plt.axes()
# Setting the background color


plt.plot(ind_stage.Year, ind_stage.Value*4, 'b^-', label='Industry')
plt.plot(fpi_stage.Year,fpi_stage.Value, 'gs-', label='Food Production Index')
plt.plot(stage.Year,stage.Value*4, 'ro-', label='Agriculture Value')
#plt.plot(gdp_stage.Year,gdp_stage.Value*10, 'b.-', label='GDp')


plt.xlabel('Year',fontdict={'fontweight':'bold', 'fontsize': 14})
plt.ylabel('Value',fontdict={'fontweight':'bold', 'fontsize': 14})
legend=plt.legend(loc = 'upper center',
                  shadow=True,
                  prop={'weight':'roman','size':'large'})

# Rectangle around the legend
frame = legend.get_frame()
frame.set_facecolor('0.95')
#plt.legend()
#plt.axis([1961, 2013,15,40])
#plt.savefig('Gas_price_figure.png', dpi=300)
#plt.set_axis_bgcolor("lightslategray")
plt.show()
```



In [145]:

```
import folium
import pandas as pd
```

In [146]:

```
country_geo = r'C:\Users\user\Downloads\world-countries\world-countries.json'
```

In [181]:

```
hist_inag = 'Urban population growth \(annual \%\)'
hist_year = 2011

maskag1 = data['IndicatorName'].str.contains(hist_inag)
maskag2 = data['Year'].isin([hist_year])

# apply our mask
stageag = data[maskag1 & maskag2]
stageag
```

Out[181]:

	CountryName	CountryCode	IndicatorName	IndicatorCode	Year	Value
5026739	Arab World	ARB	Urban population growth (annual %)	SP.URB.GROW	2011	2.846999
5027232	Caribbean small states	CSS	Urban population growth (annual %)	SP.URB.GROW	2011	0.741781
5027808	Central Europe and the Baltics	CEB	Urban population growth (annual %)	SP.URB.GROW	2011	-0.289307
5028385	East Asia & Pacific (all income levels)	EAS	Urban population growth (annual %)	SP.URB.GROW	2011	2.650938
5029168	East Asia & Pacific (developing only)	EAP	Urban population growth (annual %)	SP.URB.GROW	2011	3.030440
...	...	...	...	...	...	...
5199268	Virgin Islands (U.S.)	VIR	Urban population growth (annual %)	SP.URB.GROW	2011	-0.279932
5199861	West Bank and Gaza	WBG	Urban population growth (annual %)	SP.URB.GROW	2011	3.293334
5200591	Yemen, Rep.	YEM	Urban population growth (annual %)	SP.URB.GROW	2011	4.469232
5201460	Zambia	ZMB	Urban population growth (annual %)	SP.URB.GROW	2011	4.114779
5202259	Zimbabwe	ZWE	Urban population growth (annual %)	SP.URB.GROW	2011	1.449081

245 rows × 6 columns

In [221]:

```
plot_data = stageag[['CountryCode','Value']]
plot_data.head()
plot_data.shape
hist_inag= stageag.iloc[0]['IndicatorName']
```

In [222]:

```
map = folium.Map(location=[100, 0], zoom_start=1.5)
```

In [223]:

```
folium.Choropleth(geo_data=country_geo, data=plot_data,
             columns=['CountryCode', 'Value'],
             key_on='feature.id',
             nan_fill_color='skyblue',
             nan_fill_opacity=0.5,
             fill_color='BuPu', fill_opacity=0.7, line_opacity=0.2,
             legend_name=hist_inag).add_to(map)
```

Out[223]:

```
<folium.features.Choropleth at 0x468ca6d0c8>
```

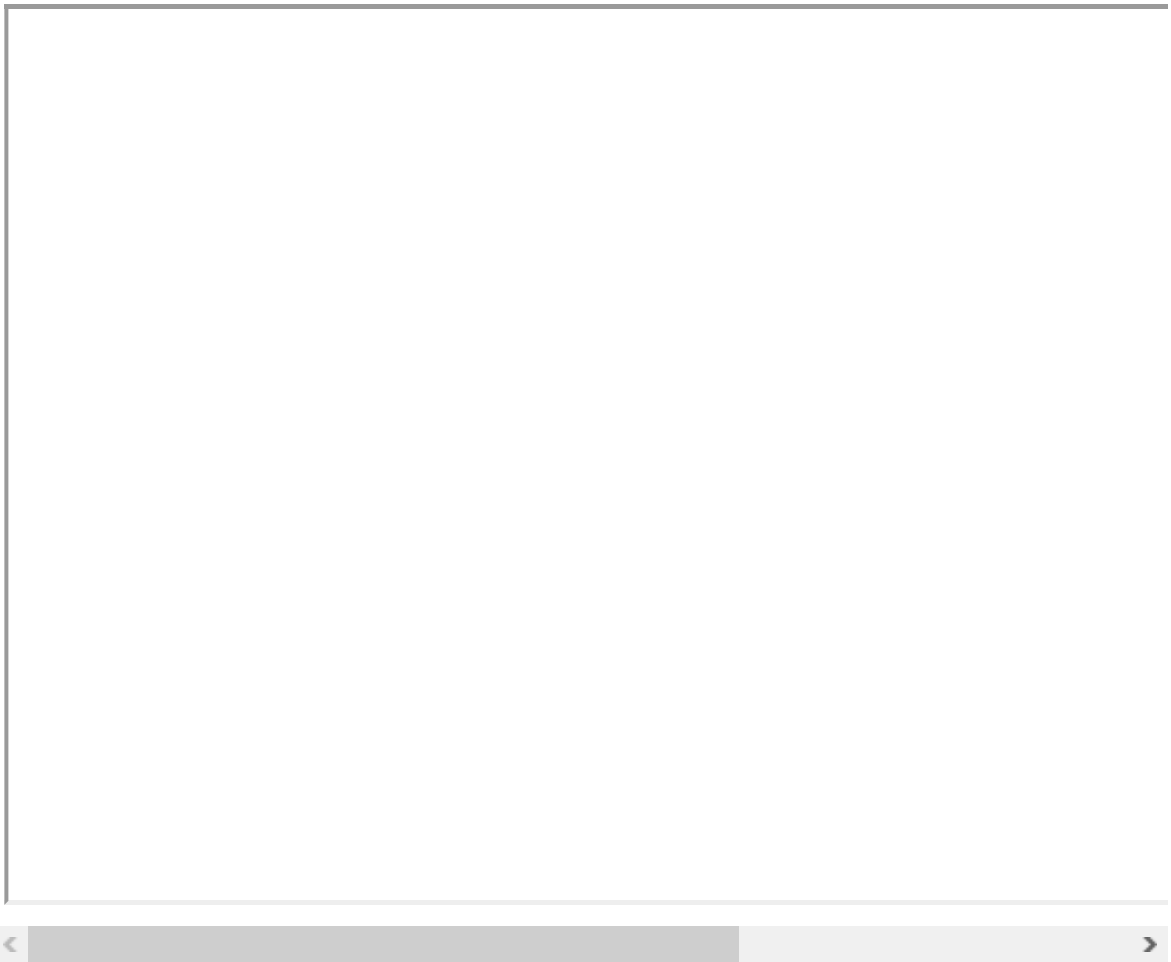
In [224]:

```
map.save('plot_data3.html')
```

In [225]:

```
from IPython.display import HTML
HTML('<iframe src=plot_data3.html width=900 height=450></iframe>')
```

Out[225]:



In [227]:

```
hist_indicatorwm = 'Agriculture, value added \(\% of GDP\)'
hist_year = 2011

mask1wm = data['IndicatorName'].str.contains(hist_indicatorwm)
mask2wm = data['Year'].isin([hist_year])

# apply our mask
stagewm = data[mask1wm & mask2wm]
stagewm
```

Out[227]:

	CountryName	CountryCode	IndicatorName	IndicatorCode	Year	Value
5026244	Arab World	ARB	Agriculture, value added (% of GDP)	NV.AGR.TOTL.ZS	2011	6.064115
5026759	Caribbean small states	CSS	Agriculture, value added (% of GDP)	NV.AGR.TOTL.ZS	2011	3.848942
5027262	Central Europe and the Baltics	CEB	Agriculture, value added (% of GDP)	NV.AGR.TOTL.ZS	2011	3.888161
5027841	East Asia & Pacific (all income levels)	EAS	Agriculture, value added (% of GDP)	NV.AGR.TOTL.ZS	2011	4.124753
5028416	East Asia & Pacific (developing only)	EAP	Agriculture, value added (% of GDP)	NV.AGR.TOTL.ZS	2011	10.474334
...	...	...	...	...	...	...
5197620	Venezuela, RB	VEN	Agriculture, value added (% of GDP)	NV.AGR.TOTL.ZS	2011	5.432204
5198373	Vietnam	VNM	Agriculture, value added (% of GDP)	NV.AGR.TOTL.ZS	2011	20.079457
5199294	West Bank and Gaza	WBG	Agriculture, value added (% of GDP)	NV.AGR.TOTL.ZS	2011	6.887994
5200626	Zambia	ZMB	Agriculture, value added (% of GDP)	NV.AGR.TOTL.ZS	2011	10.196866
5201495	Zimbabwe	ZWE	Agriculture, value added (% of GDP)	NV.AGR.TOTL.ZS	2011	13.206229

206 rows × 6 columns

In [228]:

```
plot_data = stagewm[['CountryCode','Value']]
plot_data.head()
plot_data.shape
```

Out[228]:

```
(206, 2)
```

In [229]:

```
hist_indicatorwm = stagewm.iloc[0]['IndicatorName']
```

In [230]:

```
map = folium.Map(location=[100, 0], zoom_start=1.5)
```

In [231]:

```
folium.Choropleth(geo_data=country_geo, data=plot_data,
             columns=['CountryCode', 'Value'],
             key_on='feature.id',
             nan_fill_color='lightyellow',
             nan_fill_opacity=0.5,
             fill_color='RdPu', fill_opacity=0.7, line_opacity=0.2,
             legend_name=hist_indicatorwm).add_to(map)
```

Out[231]:

```
<folium.features.Choropleth at 0x468cc379c8>
```

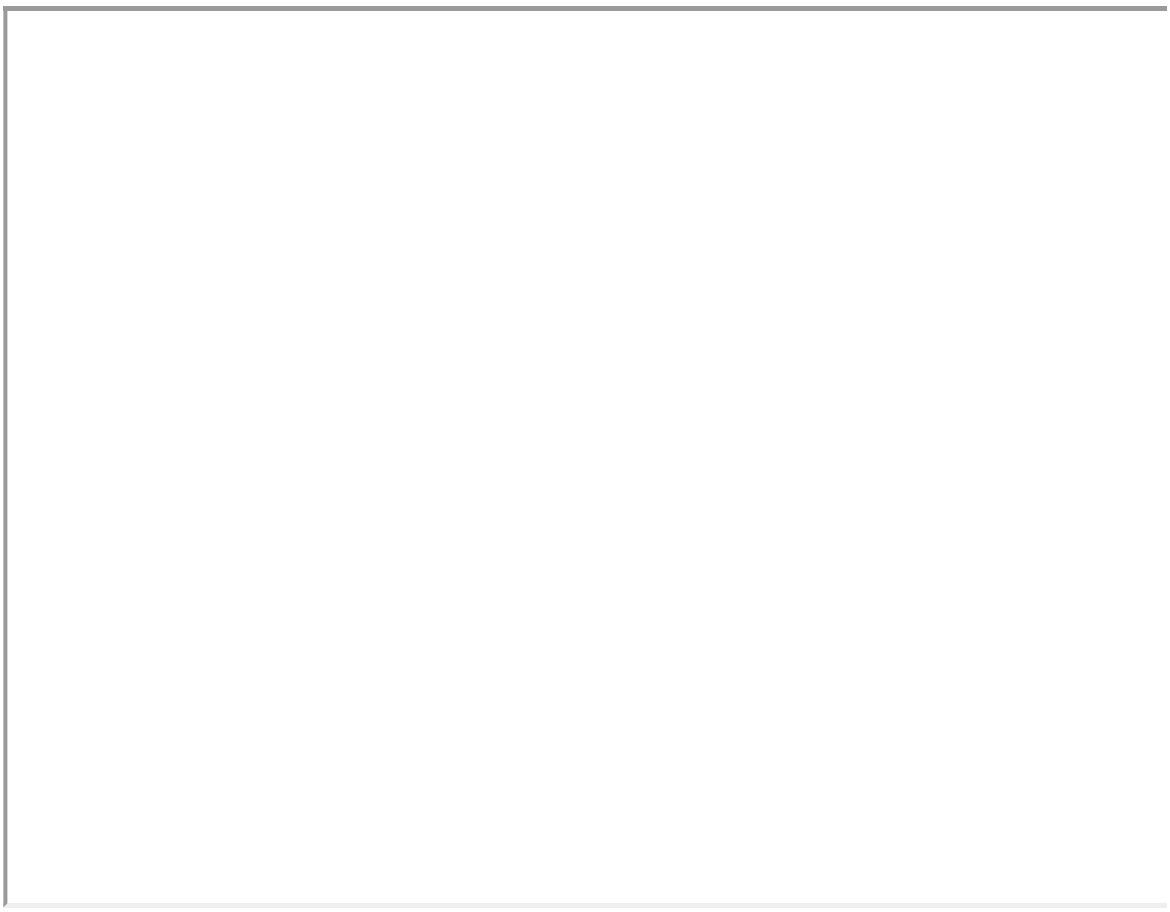
In [232]:

```
map.save('plot_data.html')
```

In [233]:

```
from IPython.display import HTML
HTML('<iframe src=plot_data.html width=900 height=450></iframe>')
```

Out[233]:



In [ ]: